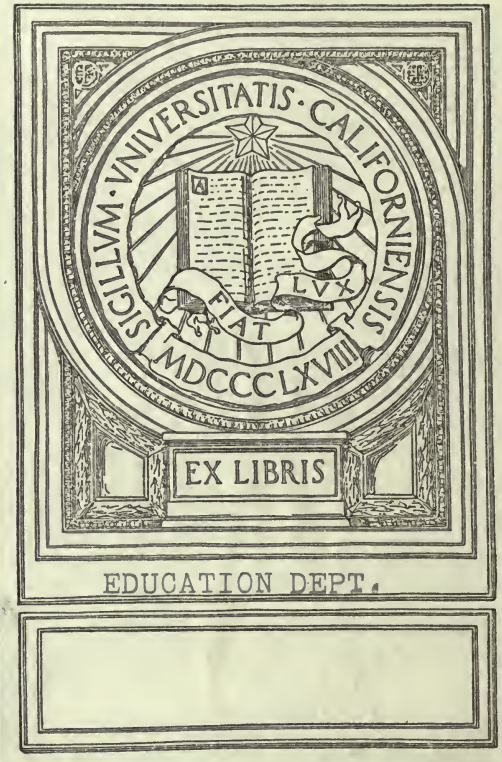
LA
391
U6

UC-NRLF
$B 58 906

YC 48724



EDUCATION DEPT.

DEPARTMENT OF THE INTERIOR
BUREAU OF EDUCATION

BULLETIN, 1916, No. 29

EDUCATIONAL SURVEY OF WYOMING

BY

A. C. MONAHAN
SPECIALIST IN RURAL SCHOOL ADMINISTRATION

AND

KATHERINE M. COOK
ASSISTANT IN RURAL EDUCATION, BUREAU OF EDUCATION

WASHINGTON
GOVERNMENT PRINTING OFFICE
1917

Digitized by the Internet Archive
in 2007 with funding from
Microsoft Corporation

http://www.archive.org/details/educationalsurve00monarich

UNIV. OF
CALIFORNIA

A WYOMING PUBLIC HIGH SCHOOL.

DEPARTMENT OF THE INTERIOR
BUREAU OF EDUCATION

BULLETIN, 1916, No. 29

EDUCATIONAL SURVEY OF WYOMING

BY

A. C. MONAHAN
SPECIALIST IN RURAL SCHOOL ADMINISTRATION

AND

KATHERINE M. COOK
ASSISTANT IN RURAL EDUCATION, BUREAU OF EDUCATION

WASHINGTON
GOVERNMENT PRINTING OFFICE
1917

LA391
U6

EDUCATION DEPT.

ADDITIONAL COPIES
OF THIS PUBLICATION MAY BE PROCURED FROM
THE SUPERINTENDENT OF DOCUMENTS
GOVERNMENT PRINTING OFFICE
WASHINGTON, D. C.
AT
15 CENTS PER COPY

CONTENTS.

	Page.
Letter of transmittal	5
Letter to the commissioner	7
I. A sketch of the history of education in Wyoming	11
Early history	11
Present system	21
II. Education in the State	27
Buildings and equipment	29
Enrollment and attendance	39
Teaching corps	43
Instruction	53
Supervision	60
III. Revenue for the support of schools	66
Inequalities of the present system of taxation	69
IV. Movements in other States as outlined in recommendations for Wyoming	83
V. Recommendations	96
VI. Appendix: statistical comparisons	105

M240616

LETTER OF TRANSMITTAL.

Department of the Interior,
Bureau of Education,
Washington, August 28, 1916.

Sir: At the request of the code committee appointed by the governor of the State of Wyoming in compliance with an act of the legislature of that State creating the committee for the purpose of studying the school system of the State and recommending new legislation, I detailed A. C. Monahan, specialist in agricultural education and rural school administration, and Katherine M. Cook, assistant in rural education in this bureau, to make a careful study of the laws of the State pertaining to education, the administration of the State school system and certain phases of the work of the schools, and to make such recommendations for the improvement of the schools through legislation and otherwise as the facts revealed by this study might seem to justify. This they have done, and the report submitted to the code committee has been approved by me. For the use of the people of the State of Wyoming and for the use of students of education throughout the country I recommend that this report, a copy of which I am transmitting herewith, be published as a bulletin of the Bureau of Education.

Respectfully submitted.

P. P. Claxton,
Commissioner.

The Secretary of the Interior.

LETTER TO THE COMMISSIONER.

DEPARTMENT OF THE INTERIOR,
BUREAU OF EDUCATION,
Washington, May 26, 1916.

SIR: There are submitted herewith the results of a survey and study of the public-school system of Wyoming, with recommendations concerning the legislation needed for its improvement. This work was undertaken at your orders as a result of a request for assistance from the State of Wyoming. The thirteenth general assembly of the State, meeting in 1915, acting on the suggestion of prominent educators of the State under the leadership of the State superintendent of public instruction, enacted a law which provided for the formation of a school code committee to make a thorough investigation into the needs of the public schools of Wyoming and the laws under which they are organized and operated; to make a comparative study of such other public schools as may be advisable; and to report to the fourteenth Legislature of the State of Wyoming recommending a revised code of school laws.

In compliance with this act, the governor of the State appointed the following men and women to constitute the Wyoming school code committee: Miss Edith K. O. Clark, State superintendent of public instruction, Cheyenne, chairman; Miss Jennie McGuffey, county superintendent of schools, Park County, Cody; Mr. John T. Hawkes, principal of the Sheridan High School, Sheridan; Dean J. O. Creager, of the College of Education, State University, Laramie; and Mr. J. J. Underwood, ranchman, Underwood. The undersigned were designated as representatives from the Bureau of Education to assist in an investigation and to make a report with recommendations for transmittal to the committee. The first meeting of the school code committee was called at Laramie in July of 1915; all members but one were present. A representative of the Bureau of Education attended this meeting. After careful discussion of various plans and procedure, a general survey of educational conditions in the State was decided upon and tentative plans were laid for collecting material for such a survey.

Method and scope of the survey.—The school code committee held a second conference in Cheyenne early in November of the same year. All members and both representatives of the bureau were present.

Plans for the conduct of a careful survey of education in the State were presented and approved, as follows:

(*a*) A thorough investigation of grounds, buildings, water supply, etc., conducted through personal investigation and collection of information through questionnaires;

(*b*) A careful inquiry into the education and professional qualifications, living conditions, and salaries of teachers, conducted in the same manner;

(*c*) An intensive study of instruction offered in three counties selected as typical of general conditions made by personal investigation by members of the committee and representatives of the bureau;

(*d*) An investigation into qualifications and work of the county superintendents;

(*e*) A study of financial support, State, county, and local;

(*f*) General information concerning high-school and city-school systems.

The point of view which the investigators kept constantly in mind in these inquiries was that of general measurement of the system as a State system in terms of service to the State. In addition to the questionnaires, letters were sent through the county superintendents to several hundred prominent people in the State, setting forth the general purpose of the survey and asking for cooperation and suggestions.

In April, 1916, another meeting of the committee was held in Cheyenne. Reports showed that the plans formulated at preceding meetings were being successfully carried out. The general plans pursued had been discussed at the meeting of the State Teachers' Association at Thermopolis and progress was being made along all lines previously agreed upon. It was decided to ask that the governor appoint an auxiliary committee of 15 prominent citizens to act in conjunction with the school code committee; and that a general education conference be held in July at the University of Wyoming, to be called and presided over by the governor of the State, the purpose of which should be to discuss the recommendations submitted by the committee, to disseminate information concerning them, and to arouse public interest in better school conditions for Wyoming.

The survey from the beginning has had in view the single purpose of the educational welfare of the children of the State. There has been a spirit of cooperation, disinterested labor, and personal sacrifice on the part of members of the committee and others who have given of their time and service. Assisting in the survey, in addition to the members of the committee, were Miss Henrietta Kolshorn, Laramie; Supt. Ira Fee, of Cheyenne; Dr. J. E. Butterworth, of the University of Wyoming; and Supt. Joseph Burch, of Kemmerer. In addition, many county and city superintendents, teachers, and school

officers responded to requests for information, and assisted in other ways; Dr. Harrison C. Dale, of the university, wrote the historical statement utilized in this report.

The material collected by the committee and other workers was turned over to the Bureau of Education. The accompanying report is made on the basis of these, of supplementary studies on Wyoming and education in Wyoming from all available sources, and on personal observations of instruction, supervision, and general educational conditions.

Respectfully submitted.

KATHERINE M. COOK,
Assistant in Rural Education.
A. C. MONAHAN,
Specialist in Rural School Administration.

The COMMISSIONER OF EDUCATION.

AN EDUCATIONAL SURVEY OF WYOMING.

I. A SKETCH OF THE HISTORY OF EDUCATION IN WYOMING.

EARLY HISTORY.[1]

The educational history of Wyoming dates from the creation of the Territory, July 25, 1868. When the first census was taken, in 1860, there were three groups of permanent settlements, two of some 100 or 150 each near Fort Bridger and Fort Laramie, and a few isolated ranches along the valley of the North Platte in what are now Platte and Goshen Counties. The total population of the Territory in 1860, including the wandering prospectors and trappers who occasionally pushed into the northern and western portions, numbered probably not more than 400. Within the next decade, however, because of the penetration of this region by the Union Pacific Railroad, the population increased rapidly.

The following table shows the population of Wyoming at various dates:

1860	[2] 400
1870	9,118
1875	[2] 14,951
1880	20,789
1885	[2] 31,391
1890	60,705
1900	92,531
1905	101,816
1910	[3] 145,965
1915	[3] 141,705

Provision for the regulation and maintenance of education was made in the first session of the Territorial assembly and approved December 10, 1869. According to provisions of the act the Territorial auditor was ex officio superintendent of public instruction, and his stipend for this service was $500. His duties as defined by the statutes were almost identically those of the present superintendent as outlined in the statutes now in force except that the apportionment was made on aggregate attendance instead of on the census basis.

[1] Digest from an article written by Harrison C. Dale, of the faculty of the State University.

[2] Estimated.

[3] The 1910 figures are from the Federal census, while the 1915 figures are from the State census, which was taken by the county assessors. It is estimated that the 1915 figures are incomplete by about 9,000.

A further act of the assembly created the office of county superintendent of schools, though no direct provision was made for the manner of election. The county tax for the maintenance of schools was fixed at not more than 2 mills on the dollar, and the county superintendents were required to report annually to the State superintendent. Should they fail to do so, they were to forfeit the sum of $100. It does not appear that this provision was ever enforced or even noticed, for year after year the State superintendent of public instruction in his annual report bemoaned the laxity of the county superintendents. The blame, no doubt, rested quite as much on the district clerks as upon the county superintendents, for the former were by law required to furnish annually a report of the affairs in their respective districts containing practically the same information which district clerks are now required to include in their reports to the county superintendent. Failure to make this report was punishable by a fine of $25. There is no record, however, that such a penalty was ever imposed.

A result of this carelessness is the absence of anything like adequate school statistics for many sections of the State. This accounts for many of the omissions and inadequacies of this history.

The board of district directors was empowered to determine the site of schoolhouses, the expenditures for the erection or rent of the same, and the curriculum to be followed in the lower schools. In the matter of secondary and high school education the determination of the last-mentioned feature was left to the county superintendent, acting in conjunction with the district board.

Provision was also made that, when there were 15 or more colored children within a specified district, the board might, with the approval of the county superintendent, provide a separate school. Apparently, however, no such segregated schools have ever been established, Negroes being admitted to the schools with whites.

The district treasurer was to keep two distinct funds, one called the "teachers' fund," comprising all moneys for school purposes, save only local taxes collected in the district, which comprised the "schoolhouse" fund.

The education act of 1869 remained in force two years, when a few minor changes were made. The State auditor was relieved of his ex officio duties as State superintendent of public instruction; the office was abolished for the time, the county superintendents reporting annually to the governor.

In the legislative session of 1873 the whole matter of education was reviewed and altered. The acts are of singular importance, being the true foundation of subsequent legislation and of the system now in force. The act of 1869 was in most respects repealed and provisions relative to the duties of the various school officers replaced

by more explicit regulations. The State librarian (an office created two years previously) was made ex officio State superintendent of public instruction.

The first report on public instruction was made in 1871 by Dr. J. H. Hayford, of Laramie, the Territorial auditor for the preceding biennium. Dr. Hayford reported good schools in Albany and Laramie Counties, fair schools in Uinta and Carbon Counties, but in Sweetwater County neither superintendent nor schools. The report embodied two summaries for Carbon and Uinta Counties, prepared by the respective county superintendents, Messrs. R. W. Baxter and R. H. Carter. There were only five counties at that time.

Statistics of schools in Carbon and Uinta Counties in 1870.

Counties.	School-houses.	Teachers.		Pupils.
		Male.	Female.	
Carbon	1	2	1	74
Uinta	1	2	2	115

At this date (1870) Wyoming had only 9,118 inhabitants—8,726 whites, 183 colored, 66 Indians (outside the reservations), and 143 Chinese. According to the report of the United States Commissioner of Education for 1873, the population was scattered along the Union Pacific Railroad for over 500 miles, with a school wherever enough children were congregated. The provision for support was liberal; it came entirely from taxation, the school lands not yet having come into market. The five counties had county superintendents. Laramie city and Cheyenne had graded schools of three departments each, to which high schools were later to be added. Schools in other districts, though small, were efficiently managed.

Beginning with the year 1883, statistical information becomes available. The following figures are taken from the manuscript reports of the superintendents of public instruction preserved in the State archives at Cheyenne:

TABLE 1.—*Data on Wyoming schools.*

	1883	1885	1889
Number of schoolhouses	39	77	138
Number of schools taught	83	132	230
Number of pupils:			
Total	3,352	4,405	7,052
Male	1,675	2,252	3,492
Female	1,677	2,153	3,560
Number of teachers:			
Total	89	148	259
Male	19	32	58
Female	70	116	201
Cost per pupil per month	$2.87	[1] $4.14	$2.78

[1] For explanation of these cost figures see History of Education in Wyoming, by Dale, published by State department of education.

The character of the school buildings in this period may be gathered from the following list, incomplete and compiled from a variety of sources: Log building with a dirt room; upper room of a railroad section house; rented building; spare room of a ranch; vacant office of a mining company; blacksmith's shop; basement of the town hall; sheep wagon.

On July 10, 1890, Wyoming was admitted to the Union. The constitution and the first session of the State legislature virtually accepted the system of education in vogue during Territorial days. From this point the modern history of education in Wyoming may be said to date.

The following table shows the growth of schoolhouse construction, number of teachers, and number of pupils since 1875, by five-year periods:

TABLE 2.—*Schoolhouses and teachers in Wyoming.*

Year.	Schoolhouses.	Number of teachers.			Pupils.
		Male.	Female.	Total.	
1875	.....	7	16	23	1,222
1880	.....	31	39	70	2,097
1885	77	40	150	190	4,988
1890	198	58	201	259	7,875
1895	305	112	362	474	11,253
1900	372	89	481	570	14,512
1905	503	107	690	797	18,823
1910	640	141	968	1,109	24,477
1915	952	223	1,411	1,634	30,816

Although the legislature in 1873 and in 1888 made efforts to establish uniform textbook adoptions, such regulations were not successfully carried out. The provision for free textbooks was adopted in 1901, and physiology and hygiene, with special reference to the use of alcohol and narcotics, were made compulsory subjects in 1885. In 1910 the study of humane treatment of animals was added and boards were required to purchase Coutant's *History of Wyoming* and Carroll's *The Sabbath as an American War Day.*

Certification.—In the education act of 1873 the county superintendent of schools was authorized—

> to examine persons, and if in his opinion such persons were qualified to teach in public schools, to give a certificate, authorizing him or her to teach a public school in his county for one year. Whenever practicable, the examination of teachers shall be competitive, and the certificate shall be graded according to the qualifications of the applicant.

A law of 1876 empowered the Territorial superintendent of public instruction to grant honorary certificates of qualification to teachers of proper learning and ability and to regulate the grade of county certificates. These "honorary certificates" were granted primarily on the basis of continuous years of service. Forty were given between

1883 and 1887. At the same time the county superintendents were empowered to grant certificates for two-year periods. During the next 10 years little change was made in the matter of certification. In 1897–98 the State superintendent of public instruction recommended that graduates of the university, especially those having taken normal training, receive certificates without further examination. This change was made soon after.

State board of examiners.—In 1899 the State board of examiners was created. Their duty was to prepare uniform examination questions and to serve as a court of appeal from the decisions of the county superintendents. During the first year, under the presidency of Prof. C. B. Ridgaway, of the university, 16 sets of questions were prepared for the use of the county superintendents. The board also examined 33 applicants for certificates, recommended 16, and declined to recommend 17. Many of the applicants who were not favorably recommended were unable to comply with the requirement of ability to teach all of the subjects usually taught in high schools of the State. Under this system many third-grade certificates (valid for one year), and a fair number of second-grade certificates (valid for three years), were issued. Practically no first-grade certificates were issued.

In 1899 provision was made for issuing three grades of certificates and a professional or State certificate, the latter to be granted by the board of examiners. Examinations for the other three grades of certificates were still conducted by the county superintendents in subjects prescribed by law.

In 1907 the board was empowered to examine all candidates for certificates in the State. Examinations were conducted at stated intervals and the recipients of certificates were allowed to teach in any county of the State. In 1909 the subjects for examination in the three classes were more specifically fixed by law.

Teachers' institutes.—The education act of 1873 required the Territorial superintendent of public instruction to conduct annually a teachers' institute lasting not less than 4 nor more than 10 days. Its chief function was the selection of textbooks. In 1883 an appropriation of $1,500 was made to pay the traveling expenses of teachers attending institutes. Four years later the attendance of teachers was required by law; they were, however, to receive compensation for transportation. Provision was further made for the payment by the counties of expenses incidental to the holding of institutes, including the compensation of lecturers. The legislature of 1913 authorized the holding of joint institutes by two or more counties. The outcome of this was the act of 1915 providing for State institutes. These were to be maintained in part by nominal fees required of all teachers in the State. The State superintendent's biennial report for 1907–8 noted the tendency to make the county

institutes a mere series of lectures. This has since been generally overcome by close attention at all meetings to the specific needs and problems of the teachers and the schools.

High schools.—The laws of the Territorial assembly provided for high schools, buildings, courses of study, etc., all to be determined by the county superintendent and board of directors. An enactment of the State legislature in 1905 provided for the creation of special high-school districts and the location of union district high-schools at specified places. In 1915 the people were empowered to lay a tax not exceeding 2 mills on the dollar for the payment of teachers' salaries and contingent expenses in such high schools and a total tax not exceeding 10 mills on the dollar in case of the construction of a building, provided such high schools maintained a four-year course qualifying for admission to the university.

The first high school established was at Cheyenne in 1875. This was followed by one at Buffalo, 1881; Newcastle, 1889; Rawlins, soon after; Lander, 1890; and Sheridan in 1893.

Kindergartens.—Kindergarten instruction began in private schools. In 1886 Mrs. F. D. M. Bratten established the Magic City Kindergarten in Cheyenne, charging a tuition fee of $4 a month. At the end of the first year she had 10 pupils. Subsequently other private kindergartens were opened in a number of communities in the State. In 1895, however, the legislature empowered the trustees of all school districts to establish free kindergartens for children between the ages of 4 and 6. Such schools were to be maintained out of the special school fund, and only graduates of approved kindergarten training schools were to be employed as teachers. In 1903 the State department reported 182 children attending kindergartens.

Private education.—In the beginning private schools exceeded in importance public schools. The census of 1870, for example, enumerated 4 public schools with 4 teachers (2 men and 2 women), while it listed 5 day and boarding schools with 11 teachers (5 men and 6 women). The public schools were attended by 175 pupils; the private schools by 130. The former had an income of $2,876, derived from taxation and public funds, while the latter had an income of $5,500, derived from tuition fees and other sources. The greater amount of income in addition to the relatively large number of teachers and small number of pupils probably indicates a higher quality of educational service on the part of the private schools.

With improvement in the standard of public education, the private schools became for a period less significant. One of the few to survive for a time was the Wyoming Institute, a Baptist school at Laramie, of which Rev. D. J. Pierce, A. M., was the first and only principal. It closed in 1873.

THE WYOMING INDUSTRIAL INSTITUTE, WORLAND, WYO. MAIN BUILDING AND POWER HOUSE.

Ranchester School, Sheridan County.

The teacher's saddle horse is on the right.

School No. 2, District 4, Albany County.

Pupils of school district No. 2.

WYOMING RURAL SCHOOLS.

The educational traditions of Laramie, however, were maintained by St. Mary's School, a Roman Catholic institution, organized as far back as 1870, but not apparently making much headway till after a decade. By the year 1881 it had 4 teachers (women) and 73 pupils. In 1885 it was moved to Cheyenne. In 1890 there were 8 teachers and 60 pupils; in 1910, 13 teachers and 170 pupils; in 1915–16, 14 teachers and 210 pupils.

Another private institution was the Wyoming Collegiate Institute, at Big Horn, a Congregational school started in 1894–95 with 2 men and 1 woman teacher and an enrollment of 34 boys and 22 girls. The previous year, however, 1893, Sheridan Public High School had been started. The Wyoming Collegiate Institute declined and was soon closed.

In 1905 the Cheyenne Business College in Cheyènne was opened and, in the same year, Big Horn College, in Basin. The latter enterprise was financed by a number of prominent citizens of Big Horn. Its scope included commerce, music, and academic subjects.

In 1909 Jireh College was founded at Jireh, Niobrara County, under the auspices of the Christian Church. This institution offers courses in secondary subjects and some instruction of college grade.

The following table shows the enrollment in the private schools of the State since 1903:

Year.	Pupils.
1903	260
1905	259
1910	350
1914	262

The university.—Since 1878 the governor and commissioner of education had expressed the belief that the Territory needed a university and a normal school. On the 6th of September of 1887 a Territorial university was opened, and four years later provision was made for adequate normal instruction. In 1892 the university undertook to grant the degree of B. D. (Bachelor of Didactics) on completion of the normal course of two years beyond the grammar grades and the degree of L. I. (Licentiate of Instruction) on the completion of an additional year of graduate work. Prof. Henry Merz was the first principal of the normal school.

The university proper opened with a faculty of seven, including the president, ex-Gov. Hoyt. The first department organized was the college of liberal arts, the acknowledged nucleus of all university departments. A preparatory department was immediately added and preparations were made for all the schools essential to a State university. The two departments immediately organized thereafter were a school of mines and a school of agriculture, although the

catalogue of 1890–91 announced also a department of law and a school of commerce. The college of agriculture was reorganized in 1891 and the division of mining the next year.

When Wyoming was admitted to the Union the constitutional convention made provision for the university. The first State legislature, which convened in Cheyenne, November 12, 1890, also passed an act to establish the Wyoming agricultural college, its location to be fixed by vote of the people, and created and named a board of five trustees to control this institution. At the same time, however, the legislature authorized the University of Wyoming at Laramie to accept the Federal appropriations for the support of agricultural colleges until such time as the agricultural college of Wyoming should be located and established. Thus an agricultural college was created at Laramie. In 1892 the question of the location of the agricultural college of Wyoming was submitted to the people, and by a plurality vote Lander was selected. No legislative enactment in conformity with this vote ensued, however, and accordingly the agricultural college remained at Laramie. In 1905 the legislature definitely fixed it at that place, repealing the act of 1891 and ignoring the popular vote of 1892. Thereupon the trustees of the "Agricultural College of Wyoming" brought suit against the treasurer of the State of Wyoming to prevent the execution of this act. The case was ultimately appealed to the Federal Supreme Court, which decided, May 13, 1907, that the popular vote of 1892 was purely advisory and that the agricultural college should remain at Laramie in conformity with the legislative act of 1905.

In 1891 the Wyoming Agricultural Experiment Station was established at Laramie and substations were located at Lander, Saratoga, Sheridan, Sundance, and Wheatland. The substations were abolished in 1897, in accordance with a ruling of the Federal Department of Agriculture.

The catalogue of 1891–92 announced provision for university extension whereby the whole State might share in the benefits of the institution, instead of those only who were so fortunate as to attend it in residence. Steps in this direction had already been taken by President Hoyt. Local extension "centers" were organized at Cheyenne with 65 members and at Laramie with 45 members and the Wyoming University extension association was formed. The following year another "center" was added at Rock Springs, with 14 members. The same year, also, a beginning of instruction by correspondence was made.

By 1893–94 the matter of preparation for the university was being more adequately handled by local high schools and a list of such accredited schools was compiled whose graduates might enter the university without further examination. The list, at this date, com-

prised Cheyenne, Evanston, Lander, Laramie, Rawlins, Rock Springs, and Sheridan.

In 1896–97 the college of agriculture was reorganized with a one-year course, a two-year course, and a four-year course. The last led to a degree and was supplemented by a graduate department in agriculture.

The following table shows the enrollment in all the departments of the university by five-year periods from 1890 to 1916:

Year.	Enrollment.
1890	82
1895	110
1900	187
1905	221
1910	315
1916	[1] 573

Finance.—The act of March, 1886, creating the university provided for its maintenance by a tax of one-fourth of 1 mill on all taxable property in the Territory. The first State legislature in 1891 undertook to offset the support granted by the agricultural college of the university under the land grant act of 1862, the Morrill Act and Hatch Act—whose terms were now complied with—by reducing the State appropriations from one-fourth to one-eighth of a mill. This remained the source of State support until 1905, when the rate was raised by the legislature to three-eighths of a mill and by the legislature of 1909 to one-half of a mill (but limited to $33,000 annually). In 1911 the amount was limited to $85,000. The legislature of 1913 fixed the tax at three-eighths of a mill, but without limitation. In 1915 an additional permanent building tax of one-eighth of a mill was voted. In addition to the income from Federal acts already noted, the agricultural college of the university and the agricultural experiment station have received appropriations from the Adams Act of 1906, the Nelson Act of 1907, and the Smith-Lever Act of 1915. By an act of the Wyoming Legislature in 1915, the university is to receive one-fourth of the income of 200,000 acres of Federal land granted to the State for "charitable, educational, penal, and reformatory institutions."

Buildings.—The first building erected was the liberal arts building, costing over $85,000, for which site and campus were in part donated by the city of Laramie and in part purchased from the Union Pacific Railroad. Since then the mechanical engineering building, Hall of Science, gymnasium and armory, heating plant, Woman's Hall, normal school building, and buildings for the agricultural college and experiment station have been erected at a total cost of $222,000. The grounds have been added to also by purchase and donation from

[1] Includes enrollment in all departments, including the summer school. See p. 25.

the Union Pacific Railroad and by the addition of the old penitentiary plant.

Miscellaneous.—Soon after the organization of the Territory some attempt was made to provide vocational education for the Indians. In 1870 the Protestant Episcopal Church maintained among the Shoshones an Indian school with 10 pupils. A few years later the school dwindled to 6 and in the year 1874 was abandoned. In 1878 a day

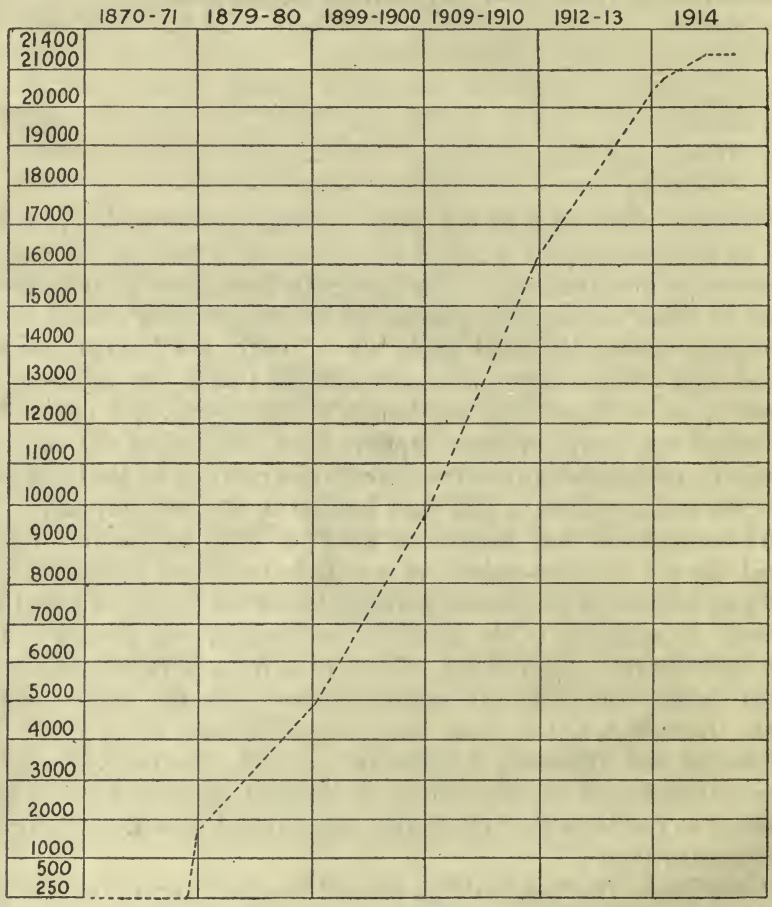


FIG. 1.—Increase in average daily attendance, Wyoming schools, 1870–1914.

school was established. More recently the task of educating the Indians has been undertaken seriously both by the churches and by the Federal Government.

The Territorial assembly in 1886 appropriated $8,000 to defray the expense of establishing a school for the blind and deaf for two years, not to be opened until there were 12 applicants for admission. The commission created under the act purchased a block of land and

a building in Cheyenne for this purpose, but the school has never been opened.

An act of the legislature in 1907 created the Wyoming Home of the Feeble-Minded and Epileptic, subsequently called the Wyoming School for Defectives, at Lander. The attendance in June, 1912, was 3, but by the end of the year it had increased to 22. On January 1, 1916, there were 36 males and 22 females at the institution. The Wyoming Industrial Institute was established at Worland in 1913 and opened in 1915.

One of the purposes of the Wyoming University Extension Association, established 1891, was the organization of a State teachers' association. A step in this direction was taken by the publication for a time of the *Wyoming School Journal*, edited by Prof. Henry Merz, of the university. Meetings of the State teachers' association were held in Laramie, 1891; Cheyenne, 1892; Rawlins, 1893; Rock Springs, 1894; Evanston, 1895; and Laramie, 1897. The association, however, was already moribund and within five years succumbed. The State superintendent of public instruction in 1902 reported Wyoming as the only State without a teachers' association. Two years later (1904) a new State teachers' association was organized at a meeting of State educators in Casper. The association was formed in September, and in December appeared the first numbers of the new *Wyoming School Journal*, which is a monthly publication. The State teachers' association has met annually since its reorganization in 1904.

THE PRESENT SYSTEM.

The present school system of the State of Wyoming may be outlined briefly as follows:

There is a State department of education composed of a State superintendent of public instruction elected every four years by popular vote, assisted by a deputy State superintendent, and an office force of three clerks appointed by the State superintendent. The State superintendent is ex officio a member of the board of trustees of the State university, of the State board of charities and reforms, and of the State land board. From one-third to one-half the time of the State superintendent, deputy, and office force is required to perform the duties of these boards. There is no State board of education.

State superintendent.—The powers and duties conferred by law upon the State superintendent are as follows: He shall collect and file all papers, reports, and public documents transmitted to him by the school officers in the several counties each year, and keep a record of all matters pertaining to the business of his office. Upon these

matters he shall report biennially to the governor. He shall apportion State school funds to the counties in the manner prescribed by law, prepare the State course of study, appoint the State board of examiners, and issue certificates on their recommendation, file and publish price lists of textbooks of publishers complying with the requirements of the law which make them eligible to do business in the State, and make such other rules and regulations as may be necessary to carry the law into effect according to its spirit and intent. In addition, he shall have "general supervision of all the district schools of the State and see that the school system is put into uniform operation as early as practicable." No means of putting this system into operation is provided, and the law is therefore a dead letter. No State superintendent has ever made any serious attempt to assume actual supervision of the school system. The powers and duties are general and indefinite and give the State superintendent little authority in the educational development of the State. The present superintendent has been very active during her term of office in getting in touch with the schools in all parts of the State through personal visits and various forms of communication.

County superintendent.—Supervision of all schools, except those in cities employing special superintendents, is in the hands of the county superintendents, who are elected for two-year terms by popular vote. In order to be eligible for election, candidates must have first-class teachers' certificates. These are issued to persons who pass examinations in elementary school subjects and the following: Elementary algebra, English and American literature, elementary psychology, physical geography, and two other subjects selected from a list of those ordinarily taught in high-school courses. One year of teaching experience is required. Salaries of superintendents in the State range from $500 to $900 per year; the average is $710. Of the 21 superintendents, 18 are women. The powers and duties of the county superintendents as conferred upon them by law are not such as to make them important factors in the schools. The county superintendent is required to collect school statistics and report to the State superintendent; to distribute reports and circulars from the State department; to apportion the county funds to the various school districts as prescribed by law; to serve with the county civil commissioners as a district boundary board to fix or change boundaries, consolidate or divide districts, and form new districts; to hold teachers' institutes of from four to eight days in length each year; to visit each school once a year; and to have general supervision over the schools of the county. The latter provision in practice means very little. In addition, the superintendent is legally empowered to recommend for dismissal all teachers who are incompetent. Boards are not

required to comply with the recommendation, and the power is rarely used.

The district.—The State is divided into 365 school districts, containing 1,150 schools, taught by 1,533 teachers. Seven of these districts are city districts having a population of 2,500 or over, employing superintendents who devote their whole time to supervision. Many of the rural districts are large and employ a number of teachers; one district in Laramie County, for example, contains 27 schools, all of which are one-teacher rural schools. Each district is under the administration of a local board of three persons elected for three years, the term of one of whom expires each year. In districts of 1,000 population or over the board may be increased to six. The directors have practically unlimited power to maintain the kind of schools they wish in their district with but little interference from higher authority. They are legally required to employ teachers certified by the State superintendent, to follow the course of study, and to maintain a minimum term of 120 days. No special provision is made to enforce these laws, however, and in many instances they are not complied with. There are no county boards of education.

Attendance in school is compulsory for all children between the ages of 7 and 14 during the entire time the school is in session. Districts with 2,500 population may appoint special truant officers; in other districts the county sheriff, deputies, and constables are assigned the duty of enforcing the compulsory attendance law. They may investigate cases of absence from school on their own knowledge or on the complaint of any resident or teacher in the county. The term varies in length throughout the State from 40 days to 220 days, the average being 163 days.

Support.—Schools are supported by funds from three sources—the State, the county, and the district. The State fund for 1915 amounted to approximately $334,110; the county funds to approximately $438,509; and the district funds to approximately $547,606. The annual State school fund is composed of the income from the sale and rent of State school lands and interest on State permanent school funds. By constitutional provision this fund is distributed to the counties in the State on the basis of the total number of children from 6 to 21 years old. The fund is reapportioned in the counties by the county superintendents to the various districts on the same basis. The State fund is increasing rapidly, and in 1915 amounted to $8.39 per capita of school population 6 to 21 years.

The county fund is composed of a $2 poll tax imposed on all persons 21 to 50 years of age, fines and forfeitures, and a tax on all taxable property in the county levied annually by the county commissioners "in an amount sufficient to raise $300 for each teacher, but not to

exceed 3 mills." The county tax, with the exception of the poll tax, is distributed to the districts on the basis of the number of teachers employed; the polls are returned to the districts in which raised.

Local funds are levied only on vote of the taxpayers of the school districts, the maximum levy being 8½ mills. Some districts raise no local funds, maintaining such schools as are possible entirely from the money received from the State and county. The local tax when voted by taxpayers is collected by the county treasurer and paid over to the treasurer of the local district. Each board may audit its treasurer's account, or a district may vote an audit. There is no other way to secure an audit. Bonds for building purposes may be issued upon a majority vote of the taxpayers of the district, but the amount must not exceed 2 per cent of the valuation of the taxable property of the district.

Certification.—Certificates are issued by the State superintendent upon the recommendation of the State board of examiners. This board is composed of three persons engaged in school work in the State, appointed by the State superintendent. They formulate questions, examine and correct papers, and pass on credentials of such applicants as are legally entitled to certificates because of graduation from preparatory institutions of specified standing. The examinations are held in the different counties and are under the supervision of the county superintendents. Temporary certificates may be issued by the State superintendent, but are legally valid only until the first regular examination held after they are issued. In practice, many teachers are employed who hold only temporary certificates. Salaries of teachers vary throughout the State from $42 to $145 per month; the average is $82 for men, $58 for women.

High schools.—High schools may be established in any district in the State or in special "high-school districts," composed of "any number of present organized and constituted districts." Such high schools are administered by special boards of trustees, each composed of six persons elected by the voters of the high-school district. They are supported by local taxes on all taxable property in the high-school district, the amount of which taxation is determined by the board of trustees. A limit of 2 mills for teachers' salaries and contingent expenses is fixed by law. High schools receive a per capita apportionment from the State funds and $300 per teacher from the county funds. There are 26 schools in the State of secondary grade, giving four-year courses, and 22 giving from one to three year courses.

Higher education.—The State university is located at Laramie, Albany County, and includes among its departments the liberal arts college, the State college of agriculture, the college of engineering, the college of education, and the State normal school. The summary

of registration for the year 1915–16, as reported in the university catalogue issued April, 1916, is given below:

STUDENTS IN RESIDENCE.

In graduate standing	14	
Seniors	23	
Juniors	40	
Sophomores	58	
Freshmen	77	
Special	58	
		270
University high school	43	
Music (not taking other subjects)	25	
Short course	11	
Summer school of 1915	270	
		349
		619
Less names counted more than once		46
		573

EXTENSION.

Correspondence study department	155
Extension center students (Cheyenne):	
English (Shakespeare)	10
Pedagogical principles	13
Mechanical drawing	20
Shop arithmetic	24
	67
Less names counted more than once	3
Total	46

Teacher training.—The State maintains but one institution for the professional training of teachers—the normal school and college of education of the State university. In practice this is an integral part of the university. The normal school pupils take all work except professional courses with the freshman and sophomore students of other departments of the university. Fifty students residing within the State were registered in the department of education in June, 1916. They were from the following counties: Albany County, 22; Big Horn, 4; Laramie, 4; Converse, 3; Crook, 3; Lincoln, 3; Niobrara, 2; Platte, 2; Sheridan 2; Weston, Sweetwater, Park, Hot Springs, and Fremont, each 1; total 50. There were 7 students from other States. These 57 are included in the enrollment of 270 given above.

TABLE 3.—*Data relative to Wyoming public schools, 1914–15.*

Counties.	Area (square miles).	Total population 6 to 21.	Districts.	School buildings.	Teachers employed.	Children enrolled.	Total expenditure.	Cost per pupil per month.
Albany	4,436	2,049	25	65	133	1,452	$86,152	$8.02
Big Horn	3,185	2,401	32	45	74	1,819	68,495	5.67
Campbell	4,774	576	6	24	38	436	21,481	4.12
Carbon	8,016	2,093	35	47	80	1,641	71,457	6.52
Converse	4,176	945	16	27	44	663	29,915	6.61
Crook	2,871	1,778	18	86	116	1,368	45,959	7.64
Fremont	12,198	1,839	39	52	87	1,501	60,238	5.92
Goshen	2,225	1,336	4	46	84	1,008	37,938	4.92
Hot Springs	2,018	675	14	14	35	569	23,371	6.52
Johnson	4,158	1,011	13	32	44	692	33,894	6.85
Laramie	2,704	4,147	10	118	174	3,005	156,025	9.49
Lincoln	8,974	4,321	24	63	129	3,431	122,502	5.59
Natrona	5,356	1,197	16	18	54	1,178	92,712	9.43
Niobrara	2,612	1,045	11	43	48	733	31,317	4.46
Park	5,248	1,477	23	33	57	1,247	52,245	12.37
Platte	2,117	1,581	8	63	112	1,462	88,224	14.48
Sheridan	2,522	4,101	36	67	119	3,035	138,090	5.76
Sweetwater	10,522	2,867	18	24	66	2,359	74,101	6.46
Uinta	2,074	1,866	5	28	59	1,683	87,694	6.91
Washakie	2,265	523	8	19	26	463	16,705	9.00
Weston	3,054	1,328	4	38	54	1,098	44,262	13.00
Total	[1] 97,914	39,156	365	952	1,633	30,816	1,382,777	7.90

[1] Includes Yellowstone Park, 3,054 square miles.

II. EDUCATION IN THE STATE.

Education in the State will be treated as a matter affecting the State as a whole. It is not the function of the legislature to consider the efficiency of individual schools, but to provide machinery which will make it possible that such educational advantages as the State desires to furnish to its children shall be available to every boy and girl in the State. Clearly some communities will always be more law-abiding and more progressive than others, depending on individual ideals and community initiative. But clearly also the State must furnish legal machinery such that every community will have the possibility of being as orderly and law-abiding as the most progressive. It must also assume certain responsibilities that tend toward forcing the most unprogressive to reach definite minimum standards for law and order set up by the State government as necessary for the preservation of life and property. The State has a similar responsibility in providing for the education of its children. It should provide a minimum standard for all counties and should then initiate such steps as are necessary to enforce this provision. It should also encourage progress and stimulate such local effort as the intelligence and progressive spirit of different communities warrant.

The constitution of Wyoming asserts that the "legislature shall provide for a complete and uniform system of public education, and shall make such provision by taxation or otherwise as to create and maintain a thorough and efficient system of public schools adequate to the proper instruction of all the youth of the State." That this may be complied with, the State must from time to time revise and adjust existing provisions according to changing conditions and growing needs. Such an adjustment necessitates a careful study of the educational situation in order that the provisions made may be exactly suited to educational needs. The study of the status of education in the State which follows is made in compliance with an act of the legislature previously explained, and represents, therefore, an effort on the part of the State of its own school system to make the kind of study indicated. The inquiry as made is not a criticism; it is merely a study of the system of education in the State as a whole. Its purpose is to set forth facts as they are, in order that such recommendations as are made may be based on actual needs and conditions and not on opinion or theory.

The efficiency of a school system may be judged by the results it achieves and by the way in which certain well-defined and established principles or standards in administration and management are adhered to. There must be included in any inquiry concerning it the various factors which make up the complete whole and which influence directly or indirectly the results obtained. These factors will be treated under the following heads: Buildings and equipment, enrollment and attendance, teaching corps, instruction, supervision, revenue and support.

School records and reports.—The statistics used in this report to the school code committee have been obtained through questionnaires sent to the various school officers, through personal visits and interviews, and from the reports of the State superintendents, county superintendents, county treasurers, the State examiner, the United States census, and annual reports of the Commissioner of Education.

Practically all data necessary for a careful investigation into school attendance should be contained in the records of the State and county education departments and should be available always. Other information of any nature concerning schools should be procurable from school officers on the request of the State department or other legally constituted authority, such for example as the Wyoming school code committee. While the investigators felt justified in expecting to obtain all necessary information in the manner thus described, unfortunately it has been impossible to do so. Of the 1,600 teachers to whom questionnaires were sent for information relative to their education, training, and experience, about two-thirds replied. Replies were received from 59 per cent of the 1,000 questionnaires sent out regarding buildings, while only 20 per cent of the school directors replied to the questionnaire concerning school expenditures. Of 21 county superintendents, 16 replied to one questionnaire sent out by the Bureau of Education for the school code committee. To another questionnaire sent to county superintendents directly from the State department in November only one reply was received up to April 1, when all data were expected in the Bureau of Education. In this latter case, as in the case of replies from school directors, the data obtained must be omitted, since the replies were too few to be representative. One county superintendent in the State failed to return to the State department any of the information requested regarding buildings and teaching qualifications. This county has, therefore, of necessity been omitted from the tables concerning these particular items.

This indicates a serious condition. The State superintendent should have authority to demand necessary reports on school conditions and power to withhold State funds if they are not received. Otherwise it follows that only the best qualified school officers will

reply, since they are most apt to be prompted by courtesy to do so. Reports most needed, namely, those from officers least qualified and from districts in which the school situation is particularly bad, will usually be missing, and conditions most needing investigation thereby escape it. The first requisite in an organized system, either State or county, is the authority to demand all necessary information concerning schools. Refusal on the part of any school officer to comply with such legal demand should be followed by forfeiture of an adequate bond or of the position held by the officer refusing.

BUILDINGS AND EQUIPMENT.

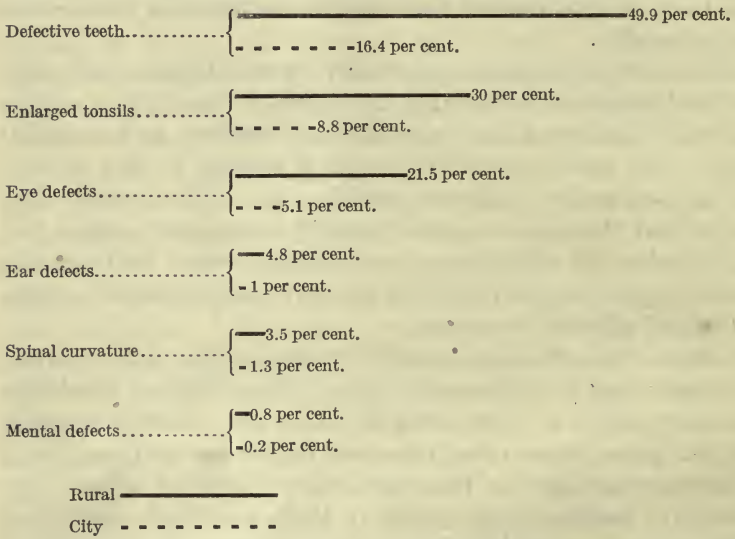
The problem of economic, convenient, and sanitary housing of schools in Wyoming is unique and difficult. The population is sparse and scattered, and schools must be relatively numerous, far apart, and small in membership in many cases for some years to come. In addition, the school population is shifting. Complaints in regard to bad housing, inconvenient location, and lack of necessary equipment have been received in large numbers by the school code committee. From these and from the investigation it seems apparent that the important matters of location, buildings, and equipment—closely related to the physical, moral, and esthetic welfare of school children—have hardly received the serious consideration which their importance justifies.

All children should have an opportunity for an education at public expense in schoolhouses reasonably accessible to their homes and in buildings which insure at least convenience, comfort, and healthful conditions. One need not travel far in Wyoming to find schoolhouses of the best and of the worst possible types. The greatest need seems to be that the State or county should adopt some settled and economical policy of schoolhouse construction which will provide measures of general improvement for present conditions and certain minimum standards for the future.

Distribution.—Schoolhouses should be so located that at least an elementary school may be within walking or riding distance (probably not to exceed 6 miles) of every child of school age. County superintendents and others report that there are now many children living so far from any schoolhouse that they are deprived of opportunity for education. Letters in the hands of the school code committee show that in some cases children as old as 14 years have attended school a few months only. One report cites the case of a schoolhouse which is located on one side of the river (where the majority of the voters reside), while practically all the children of school age in the district live on the other side. When it is necessary to cross the river by bridge, many children must walk from 3 to 6 miles to reach the schoolhouse. On the other hand, city superintendents

complain that many unnecessary country schools are maintained on account of the present system of distributing county money in proportion to the number of teachers and that some families are supplied with what practically amounts to a private governess and maid at public expense. Plainly, some of the schools now existing should be abandoned and others established where there are none.

Sanitary requirements.—It is evident that a satisfactory system of schools will provide comfortable and sanitary housing and such equipment as good work necessitates. Appropriateness to the purpose for which intended, convenience, and beauty are other important considerations. The schoolhouse and grounds should represent all that the intelligence, good taste, and financial ability of the community warrant. Recent investigations of the health of rural children and the comparisons made of health conditions in rural and city districts have aroused throughout the country a new interest in rural school buildings and equipment and their relation to the health of children. Results show that country children are not as healthy and have more physical defects than children of the cities, even including the children of the slums. The accompanying graph indicates a few of the conditions revealed by these investigations:



According to a pamphlet recently distributed by the Bureau of Education:

Healthful and attractive rural schools are absolutely essential to the physical, mental, social, economic, and moral well-being of the nation as a whole. Country school children should have as sanitary and attractive schools and as intelligent and effective health care as school children in the cities.

This pamphlet proposes the following minimum health requirements for rural schools:

The *one-teacher* country school should contain in addition to the classroom:

(*a*) A small entrance hall, not less than 6 by 8 feet.

(*b*) A small retiring room, not less than 8 by 10 feet, to be used as an emergency room in case of illness or accident, for a teacher's conference room, for school library, and for health inspection, a feature now being added to the work of the rural school.

(*c*) A small room, not less than 8 by 10 feet, for a workshop, for instruction in cooking, and for the preparation of refreshments when the school is used, as it should be, for social purposes.

Classroom should not be less than 30 feet long, 20 feet wide, and 12 feet high. This will provide space enough for a maximum of 30 pupils.

VENTILATION AND HEATING.

The schoolroom should always receive fresh air coming directly from out of doors in one of the following arrangements:

(*a*) Through wide open windows in mild weather.

(*b*) Through window board ventilators under all other conditions, except when, with furnace or jacketed stove, special and adequate inlets and exits for air are provided.

Heating.—Unless furnace or some other basement system of heating is installed, at least a properly *jacketed stove* is required. (No unjacketed stove should be tolerated in any school.)

The jacketed stove should have a direct fresh-air inlet about 12 inches square, opening through the wall of the schoolhouse into the jacket against the middle or hottest part of the stove.

The exit for foul air should be through an opening at least 16 inches square on the wall near the floor on the same side of the room as the stove is located.

A fireplace with flue adjoining the stove chimney makes a good exit for bad air.[1]

Temperature.—Every school should have a thermometer, and the temperature in cold weather should be kept between 66° and 68° F.

LIGHTING.

The schoolroom should receive an abundance of light, sufficient for darkest days, with all parts of the room adequately illuminated.

The area of glass in windows should be from one-fifth to one-fourth of the floor area.

The best arrangement, according to present ideas, is to have the light come only from the left side of the pupils and from the long wall of the classroom. Windows may be allowed on rear as well as on the left side, but the sills of windows in the rear of the room should be not less than 7 feet above the floor. High windows not less than 7 feet from the floor may be permitted on the right side if thoroughly shaded as an aid to cross ventilation, but not for lighting.

There should be no trees or shrubbery near the schoolhouse which will interfere with the lighting and natural ventilation of the classroom.

The school building should so face that the schoolroom will receive the direct sunlight at some time during the day. The main windows of the schoolroom should not face either directly north or south. East or west facing is desirable.

Shades should be provided at tops and bottoms of windows with translucent shades at top, so that light may be properly controlled on bright days.

---

[1] The following arrangement for ventilating flue is required in one Western State: A circular sheet steel smoke flue, passing up in center of ventilating shaft (foul air exit) 20 inches square in the clear.

Schoolroom colors.—The best colors for the schoolroom in relation to lighting are:

Ceiling.—White or light cream.

Walls.—Light gray or light green.

Blackboards.—Black, but not glossy.

CLEANLINESS.

The schoolhouse and surroundings should be kept as clean as a good housekeeper keeps her home.

(*a*) No dry sweeping or dry dusting should be allowed.

(*b*) Floors and furniture should be cleaned with damp sweepers and oily cloths.

(*c*) Scrubbing, sunning, and airing are better than any form of fumigation.

DRINKING WATER.

Drinking water should be available for every pupil at any time of day which does not interfere with the school program.

Every rural school should have a sanitary drinking fountain located just inside or outside the schoolhouse entrance.

Drinking water should come from a safe source. Its purity should be certified by an examination by the State board of health or by some other equally reliable authority.

A common drinking cup is always dangerous and should never be tolerated.

Individual drinking cups are theoretically and in some conditions all right, but practical experience has proved that in schools individual cups, to be used more than once, are unsatisfactory and unhygienic. Therefore, they are not to be advocated nor approved for any school.

Sufficient pressure for running water for drinking fountain or other uses in the rural school may always be provided from any source without excessive expense by a storage tank or by pressure tank with force pump.

WATER FOR WASHING.

Children in all schools should have facilities for washing hands available at least:

(*a*) Always after the use of the toilet.

(*b*) Always before eating.

(*c*) Frequently after playing outdoors, writing on blackboard, or doing other forms of handwork connected with the school.

Individual clean towels should always be used.

Paper towels are the cheapest and most practicable.

The common towel is as dangerous to health as the common drinking cup.

FURNITURE.

School seats and desks should be hygienic in type and adjusted at least twice a year to the size and needs of growing children. Seats and desks should be individual, separate, adjustable, clean.

Books and other materials of instruction should not only be sanitary, but attractive enough to stimulate a wholesome response from the pupils.

TOILETS AND PRIVIES.

Toilets and privies should be sanitary in location, construction, and in maintenance.

(*a*) If water carriage system for sewage is available, separate toilets for boys and girls should be located in the schoolhouse, with separate entrances on different sides or corners of the school building.

Powell consolidated school, Park County.

District No. 3, Washakie County, 40 miles from the railroad.

Bennett Creek School, District No. 8.

Buffalo Basin School, Crook County

A GROUP OF WYOMING SCHOOL BUILDINGS.

DISTRICT NO. 5, HOT SPRINGS COUNTY.

EMERSON SCHOOL, DISTRICT NO. 17, FREMONT COUNTY.

(*b*) If there is no water carriage system, separate privies should be located at least 50 feet in the different directions from the schoolhouse, with the entrances well screened.

(*c*) The privy should be rainproof, well ventilated, and one of the following types:

1. Dry-earth closet.
2. Septic-tank container.
3. With a water-tight vault or box.

All containers of excreta should be water-tight, thoroughly screened against insects, and easily cleaned at frequent intervals.

No cesspool should be used unless it is water-tight and easily emptied and cleaned.

All excreta should be either burned, buried, treated by subsoil drainage, reduced by septic-tank treatment, or properly distributed on tilled land as fertilizer.

All schoolhouses and privies should be thoroughly and effectively screened against flies and mosquitoes.

Schoolhouses and outhouses should be absolutely free from all defacing and obscene marks.

Buildings should be kept in good repair and with whole windows.

The tables which follow this section give a general idea of how Wyoming lives up to these minimum requirements in rural communities. The statistics include all school buildings, rural and urban, and therefore show a higher average than if rural schools alone were included. Table 4, which gives detailed data by counties, shows that many buildings are in bad condition inside and out. The exact percentage of districts having such buildings varies from 8 per cent of those reporting in one county to 66 per cent in another. A few excerpts from reports received by the code committee will show that these defects are often very serious ones:

1. Outside finish, mud; inside finish, mud; ventilation, door only.
2. Papered with newspapers; floors, poor.
3. Floor, rough; no paint, not ceiled overhead.
4. Inside finish, poor; large cracks in floor; plaster off the ceiling.
5. Cracked walls, uneven floor, ill-fitting windows.
6. Stove smokes, ventilated by cracks and broken window glass.
7. Building 25 years old, log, in wretched repair, stucco falling out, an abandoned cabin.
8. Cracks in walls, stuffed with rags.
9. Poor outside and inside; finished in rough logs and ventilated by cracks; no shades no ventilation, no outbuildings.
10. Schoolhouse in pasture, no fence, stock use house as windbreak.

Heating and lighting.—Over 73 per cent of the schools reporting are heated by ordinary stoves, about 10 per cent with jacketed stoves, and the others by furnace or steam. Steam-heated buildings and those provided with ventilating systems are confined to towns and cities. Windows are the only means of ventilating in 78 per cent of all the school buildings. At least three counties report all of their schools ventilated by windows only. This means that foul air is breathed by the children the greater part of the day, unless the teacher is trained in schoolroom ventilation and is unusually

careful. Jacketed stoves with ventilating attachments in country schools mean reasonable comfort for the children, while rooms heated by unjacketed stoves are almost sure to be uncomfortably warm for those near the stove, and cold for those in the remote corners of the room. In the counties reporting, the number of buildings heated with jacketed stoves varies from 0 to 15 per cent of the total. Relatively few of the rural schools in the State are properly lighted. The country schoolhouses are usually of the box-car variety with windows on both sides or on three sides. Insufficient or cross lighting is reported in 61 per cent of the schools of the State.

Equipment.—The reports received indicate that the majority of rural schools in the State have little equipment. Every school should not only be supplied with cloakrooms, workrooms, adjustable desks, and the like, but with a liberal number of books for reference and supplementary reading, globes, maps, dictionaries, etc. These need not be expensive, but they should be carefully selected by those familiar with school work. Money should not be spent on useless material. One county reports only 10 per cent of schools supplied with books other than the basic texts, and 40 per cent of the schools in the State as a whole report similarly.

Sites and grounds.—The question of convenience of access is so important in deciding the location of schoolhouses that appropriateness in other respects must sometimes be lost sight of. The schoolhouse should be located in as healthful a place as exists in the community. The yard should always be well drained. In a few instances school grounds are reported as constantly flooded with waste water from irrigation. Very few reports indicate that any consideration whatever was given to drainage and soil in the selection of the school site. The reports show that very little attention is given to beautifying the school grounds in the rural districts and that there are practically no yards suitable or equipped for play except in cities and consolidated schools. The feeling is all too common in rural communities that country children have little need of play—that their out-of-door life and the healthful conditions which usually prevail in the country compensate for the lack of recreation. This is, of course, a mistaken view. Playground room and simple equipment are not luxuries, but necessities.

Water supply.—The water supply is a serious problem from the point of view of health and cleanliness. The table appended shows four counties in which none of the schools reporting have water on the school grounds; relatively few of the schools in the State (23 per cent) have water on the school grounds. In many cases the reports show that the teacher or children carry water for drinking long distances, often in open pails left uncovered throughout the day. Drink-

ing water for children is so intimately related to their health that it deserves special attention. Lack of water, polluted water supply, insanitary arrangements for keeping water and for drinking it are fruitful sources of disease. There should be sanitary fountains on the school grounds where possible; but individual drinking cups, if kept clean and free from dust and germs, or paper cups—which are not costly—are also sanitary and satisfactory if the water is kept in covered jars. Some counties report no sanitary fountains or individual drinking cups in use. In the State as a whole about 9 per cent of the schools use sanitary fountains and 41 per cent individual drinking cups. Apparently little care is taken to see that the cups are kept clean and the water is rarely kept in covered receptacles. Not only should drinking water be available at all times, but water for washing and individual towels should also be furnished, and water for keeping the schoolhouse scrubbed and cleaned in order that it may be as sanitary and as wholesome as the best home in the community. Children should be taught hygiene and sanitation through example as well as precept. The difficulty of a satisfactory solution of this problem is fully realized. Wells can not always be provided on the school grounds, nor water piped there. Some arrangement for carrying it in large quantities and for properly storing it will be necessary in many cases. The important thing is that the matter of water supply be considered in the selection of a school site, and that some sanitary and adequate provision be made in the future before schoolhouses are definitely located. A competent administrative authority should have power to inspect and condemn sites and grounds as well as buildings when insanitary conditions prevail which can not be remedied.

Outbuildings.—The necessity of such supervisory control is still more apparent from an examination of reports concerning toilets. Some districts provide no toilets at all; in others one toilet is used by boys and girls and teacher. In many cases where two are supplied, they are, according to one local investigator, "dens of filth and neglect; they are not scrubbed, and pits are not cleaned or disinfected. Often the pits are full to overflowing, and often there are no doors." Over 50 per cent of the total number reporting from the State were reported as poor or in need of repairs; 4 per cent of the schools reported definitely that they had no outbuildings; and 28 per cent have but one. It need scarcely be added that such a condition needs immediate attention and is ample evidence of the need of an inspecting and supervisory control of buildings and grounds.

To summarize: It is very important that means be provided to insure adequate and sanitary buildings located on accessible and healthful sites where pure water can be had. Buildings, grounds,

and outbuildings should be inspected and supervised by competent authorities and existing conditions remedied without unnecessary delay.

Report of school building survey.

	Number.	Per cent.
Total number of school buildings in State	952	100
Total number of building reports received	557	59
Number of school buildings built after 1900 and reported new	383	*69
Number built before 1900 and reported old	80	14
Number not reporting on this item	94	17
Material in buildings:		
Brick or stone	63	11
Log or sod	141	25
Frame	331	59
Number not reporting on this item	22	4
Inside finish of buildings:		
Good	316	55
Poor	171	31
Number not reporting on this item	70	13
Outside finish of buildings:		
Good	314	56
Poor	146	26
Number not reporting on this item	97	17
Lighting:		
Side or rear lighting (good)	143	26
Insufficient or cross lighting (unsatisfactory)	342	61
Number not reporting on this item	72	12
Heating:		
Steam or furnace	44	8
Unjacketed stove	406	73
Jacketed stove	59	11
Both a jacketed and an unjacketed stove	25	4
Number not reporting on this item	23	4
Ventilation:		
Windows only means supplied	438	79
Special provision	79	14
Number not reporting on this item	40	7
Kind of desks:		
Single	365	66
Double	109	20
Double and single reported	58	10
No desks furnished	7	1
Number not reporting on this item	18	3
Adjustable	223	40
Stationary	257	46
Number not reporting on this item	77	14
Buildings equipped with:		
Charts	302	54
None	255	46
Dictionaries	369	66
None	188	34
Supplementary books	232	42
None	325	58
Shades	199	38
None	358	64
Pictures	214	38
None	343	62
Sanitary fountains	50	9
Individual cups	226	41
No provision	28	5
Number not reporting on this item	253	45
Buildings employing janitor:		
Janitor employed	89	16
Teacher acts as janitor	438	79
Number not reporting on this item	30	5
Buildings reporting:		
Assembly rooms	16	.....
Gymnasiums	11	.....
Work rooms	39	.....
Rest or cloak rooms	125	.....
Fence:		
Yards with fence	183	33
No fence	364	65
Irrigation:		
Irrigated	54	10
Dry or not reporting on this item	503	90
Trees:		
Trees	71	13
No trees	480	87

*In this and the following items, percentages are based on the number reporting, which is 59 per cent of the whole.

Report of school building survey—Continued

	Number.	Per cent.
Playground equipment:		
Number having equipment	54	10
Number not reporting any equipment	503	90
Toilets:		
One only	167	28
Two	330	58
None	23	4
Number not reporting on this item	37	7
Condition of toilets:		
Good	225	40
Poor or in need of repairs	302	54
Number not reporting on this item	30	5
Free from obscene markings	367	.....
Connected with sewers	10	.....
Water source:		
Well	100	18
Water piped	36	6
Carried from home, springs, or river by pupils	201	36
Number not reporting on this item	220	39

Outbuilding report from one county.

Schools reported	51	Condition of repair:		Free from markings	32
One outhouse only	14	Good	17	Not free from markings	4
Two	20	Poor	16	No report	15
None	4	Not given	18		
No report received	13				

TABLE 4.—*Schoolhouses, grounds, and equipment*

[The numbers in all figure columns except the first, "Number reporting," indicate per cents.]

County.	Number reporting.	Buildings relatively new.	Buildings of brick or stone.	Buildings of log or sod.	Buildings of wood.	Condition of buildings.		Lighting.		Heating.			Ventilation, no means provided.	Desks, double, old.	Equipment.													Grounds.			Toilets.			Water on grounds.
						Inside poor.	Outside poor.	Good, side or rear.	Poor, cross lighting.	Steam.	Stove, jacketed.	Stove, not jacketed.			Charts furnished.	Dictionary.	Books supplied.	Walls decorated.	Shades.	Pictures.	Janitor furnished.	Assembly room.	Gymnasium.	Workroom.	Cloakroom.	Sanitary fountain.	Individual cups.	Fenced.	Trees.	Play equipment.	One only.	None.	Condition good.	
Albany[1]	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Big Horn	35	80	33	25	42	8	8	25	75	5	12	83	80	70	60	85	54	8	33	34	31	3	3	26	40	8	40	14	17	17	23	0	40	37
Campbell	12	100	0	33	66	66	16	16	84	0	17	83	100	66	66	75	16	0	50	17	0	0	0	0	8	0	42	33	8	8	25	9	67	25
Carbon	23	49	33	33	33	12	16	51	49	4	46	50	88	33	50	90	78	50	68	57	4	0	0	0	51	26	60	22	13	25	22	8	48	39
Converse	37	61	0	16	84	50	20	16	84	4	24	72	87	25	65	64	51	0	43	41	5	3	0	6	21	5	40	24	8	8	24	0	21	3
Crook	27	50	7	18	77	30	33	14	86	0	8	92	99	60	51	55	22	0	25	26	4	0	0	15	0	0	26	33	22	4	52	15	30	17
Fremont	60	66	10	50	40	20	16	25	75	12	12	76	66	48	51	66	66	0	66	78	8	3	2	2	20	3	40	15	18	5	32	10	40	33
Goshen	37	73	0	7	93	50	54	5	95	0	20	80	77	20	16	66	10	70	22	24	3	0	0	0	9	0	36	23	0	12	25	40	30	12
Johnson	3	.....	0	33	66	66	66	....	100	0	....	100	100	0	0	33	33	0	33	....	33	0	0	0	33	0	0	67	0	0	33	0	100	100
Laramie	69	60	12	12½	75	33	16	28	72	9	20	71	68	12	67	70	38	1	35	41	17	6	7	12	20	12	38	52	10	8	13	15	60	20
Lincoln	11	49	0	82	18	50	50	10	90	9	31	60	51	14	25	25	25	25	26	27	18	0	0	9	18	9	18	9	9	9	45	18	36	0
Natrona	16	75	18	40	42	25	25	25	75	18	26	56	33	20	48	68	62	25	20	25	19	12	12	19	44	19	19	6	12	0	31	19	23	0
Niobrara	17	78	0	18	82	50	50	5	95	0	16	84	82	87	18	47	21	58	20	17	0	0	0	0	6	0	30	12	0	4	29	12	3	0
Park	25	65	20	33	47	16	26	30	70	8	68	25	84	50	68	80	76	50	68	68	12	0	0	0	52	8	80	65	28	20	32	0	80	24
Platte	90	66	10	20	70	14	11	33	66	4	11	85	85	5	60	66	55	5	45	42	8	4	0	0	3	4	29	24	16	6	53	4	17	33
Sweetwater	6	66	0	66	33	50	50	50	50	0	16	84	100	16	66	66	50	50	33	33	67	0	0	0	50	17	17	50	0	0	33	0	50	0
Sheridan	26	65	11	4	85	14	16	20	80	4	11	85	73	73	76	80	76	0	34	69	31	0	0	0	50	7	73	65	15	13	8	0	31	48
Uinta	32	43	9	9	82	50	30	25	75	12	10	78	52	16	55	44	33	15	16	28	37	3	3	3	40	44	28	47	7	12	9	22	29	10
Weston	26	50	20	4	76	50	50	39	61	7	8	85	81	12	25	50	24	15	50	27	19	4	4	4	12	7	46	37	20	8	27	19	23	48

[1] No replies.

ENROLLMENT AND ATTENDANCE.

The data on enrollment and attendance herein submitted are gathered principally from reports of the county superintendents to the State superintendent. Unfortunately these reports are very incomplete, and do not contain many of the most important items concerning attendance. To illustrate: Nearly 85 per cent of the schools of Wyoming are one-teacher schools. In some cases many of them are included in one district; one district in Laramie County has 27. The county superintendents' reports give only averages by districts. Averages do not show the actual conditions, for in single districts there are schools in session a short term only, with teachers paid low salaries and the attendance very small, while there are others exactly opposite in each of these particulars. The average shows conditions somewhere between the two, or something which does not exist at all. A feature of the superintendent's report should be the presentation of such discrepancies. Data were not obtainable in the time at our disposal to show with any accuracy how many small, short-term schools having poorly paid teachers there are in the State, or in how many schools the percentage of attendance is very low.

Reliable data relative to the percentage of enrollment could not be obtained in spite of the importance of such information. An efficient school system enrolls all children of actual school age (approximately 6 to 18[1] years of age, if high schools are maintained), and holds them in school until they have finished both elementary and high schools. However effective may be the instruction furnished, unless the children are enrolled and attend school regularly the result is unsatisfactory. The "census" as given in the county superintendents' reports is the number of all children 6 to 21 years of age. No figures are available to show the number of children of actual school age, generally 6 to 18[1] years. Percentage of enrollment should be computed on the basis of the number of actual school age and the actual enrollment. The figures given for actual enrollment in the county superintendents' reports are evidently not reliable. This is due to the lack of system in keeping records on the part of the school district trustees, from whom the county superintendents collect the data. According to the county superintendents' reports for the year 1915, 78 per cent of the census children (6 to 21 years) were enrolled in school. This means an enrollment equal to the total number of children of actual school age (6 to 18[1] years), which is, of course, not probable. The United States Census of 1910 reported 35,776 children from 6 to 21 years of age in Wyoming, with 64 per cent enrolled in school. This is probably more nearly correct. The estimate made by the bureau is given in the appendix.

---

[1]Inclusive.

Other important data not available in State, county, or district records (except in a few districts) are these: Percentage of enrollment in average daily attendance; number of eighth-grade graduates; census of children of high-school age and percentage of these children enrolled in high school; census of children of high-school age in districts where high schools are not available; number of children of elementary school age not attending full term taught in the district as specified by the compulsory attendance law; and age-grade data. All of these items should be available for each school and for each district, and averages by counties should be made only when needed for special purposes. The last item—age-grade data—doubtless needs a little explanation. Experience proves that over-age shortens school life. Especially is this true when children are two years or more over-age; children three years over-age rarely attend school beyond the sixth grade. Information concerning age grade of children enrolled in school is, therefore, valuable in checking up the efficiency of the school system. As soon as a more centralized county system is organized and a reasonable degree of uniformity of grading is assured, the forms filed in the office of the county superintendent should contain information concerning the number of children in every grade, with their ages, lists of promotions by grades, and information as detailed as possible concerning children who leave school at the close of the compulsory school period.

The following table shows the census, the total enrollment, the high-school enrollment, and the number between 7 and 14[1] years of age not enrolled in any school:

TABLE 5.—*Census and enrollment, 1914–15.*

Counties.	Census (6–21).	Enrollment.	Per capita cost per month (average).[2]	Attending high school.	Number between 7 and 14 years of age not attending school.
Albany	2,049	1,452	$8.02	180	122
Big Horn	2,401	1,819	5.67	146	60
Campbell	576	436	4.12	28	9
Carbon	2,093	1,641	6.52	148	11
Converse	945	663	6.61	89	4
Crook	1,778	1,358	7.64	51	58
Fremont	1,839	1,501	5.92	161	119
Goshen	1,336	984	4.92	52	50
Hot Springs	675	569	6.52	45	17
Johnson	1,011	692	6.85	76	17
Laramie	4,147	3,005	9.49	366	65
Lincoln	4,321	3,431	5.59	294	93
Natrona	1,197	1,176	9.43	131	23
Niobrara	1,045	733	4.46	45	51
Park	1,477	1,247	12.37	157	41
Platte	1,581	1,462	14.48	133	7
Sheridan	4,101	3,035	5.76	343	5
Sweetwater	2,867	2,343	6.46	260	10
Unita	1,866	1,683	6.91	89	29
Washake	523	436	9.00	47	13
Weston	1,328	1,098	13.00	72	5
Total					809

[1] Inclusive. [2] Based on enrollment.

These figures are taken from the county superintendents' reports and show that 809 children between 7 and 14 years of age are not enrolled in any school. This is probably a low estimate, since, as explained above, the United States census report for 1910 shows a much larger number than the State superintendent's report, and the present method of estimating information for school purposes leaves room for errors and omissions. In Albany County 10 per cent of the census children between the ages of 7 and 14 years are not enrolled in school. This may be due to laxity on the part of the attendance officer, or it may be due to the fact that some children live so far from school that they are unable to attend.

Though there are no available data to show what percentage of actual school population is enrolled in school and how regularly those enrolled attend school, it is, however, possible to obtain from the county superintendents' reports the average number of days attended by each pupil enrolled and the maximum and minimum terms by districts. In a few rural districts schools are maintained but two months, in others three, four, or five months, and a six months' term seems to be relatively prevalent. Practically all cities and towns maintain schools nine and one-half months. Nine months (180 school days) should be the minimum term in any district. The variation indicates that gross injustice is suffered by some children, since they have a possibility of only a few months of school per year. It also shows the inequality of opportunity offered under the existing system of school management.

A similar irregularity and consequent injustice is shown in the average number of days attended. Even in a county in which the minimum length of term is six months, or 120 days, the average number of days actually attended by each child enrolled is but 89. Schools in this county are evidently not holding pupils in school during the full term, even when the term is a short one, and, consequently, it is evident that the attendance law is not being enforced. The school term should be increased throughout the State to 180 days, and schools should be so respected in the various communities and should so appeal to the interests of the children that all those enrolled would attend regularly, except when kept away because of illness or other unavoidable reasons.

Regularity of attendance influences the cost of schooling. Data available do not show the cost per pupil on attendance basis, which really represents the actual cost. The per capita cost on enrollment basis, which now varies according to the table from a minimum of $4.12 per month in Campbell County to a maximum of $14.50 in Platte County, is much lower than if computed on an attendance basis. If attendance were better for each district, the actual cost per

district would be no greater than now, the per capita cost smaller, and the educational results far more satisfactory.

Summary.—The reports of all school officers to the county superintendents and State superintendent should be revised to include important items of information now omitted. A follow-up system should be in force, so that these reports may be filed with the proper authorities at specified times. The present laxity in the enforcement of the compulsory-attendance law should be remedied and better attendance encouraged by State and county.[1]

Secondary schools.—The percentage of pupils enrolled (based on total census children of high-school age), the average daily attendance, the number of teachers, the branches taught, and other important data regarding high schools could not be obtained. Except for the item of total enrollment, no available reports give separate data for high schools either in regard to census and attendance or number and qualifications of teachers. Although two different attempts were made by the State superintendent to obtain information from 47 reported high schools (State superintendent's annual report) in the State, only 17 replied—a number not large enough to be representative of the State as a whole. From information obtainable from the State department, State university, and the United States Bureau of Education, there are 26 high schools giving a four-year course and 21 others giving some high-school work from one to three years.

The enrollment in all but a few of these is very small and the number of teachers small. In some cases four-year high schools are conducted by one teacher. In a few cases rural teachers are attempting to teach some high-school work in connection with their regular elementary classes. Taking time for this is unjust to the elementary pupils and the work is probably of little value to those taking secondary subjects.

If it were possible to ascertain the number of children of high-school age not enrolled in any high school, indications are that it would be very large. The city of Cheyenne, with a total enrollment of 1,909 (county superintendent's report, 1915), enrolls 288 pupils in the high school. This is 15 per cent of the total district enrollment. The State at large, with a total enrollment of 30,816, enrolls 2,912 in high schools, only 9 per cent of the total enrollment. This estimate includes the cities of Cheyenne, Sheridan, Laramie, and others, where high-school enrollment is relatively large. The indications are, therefore, that a very small percentage, probably not more than 5 or 6 per cent of the total enrollment in rural communities, is in high schools. Estimating from figures in the report of the Commissioner of Education for 1911, there were in Wyoming,

[1] For detailed suggestions, see p. 91.

in 1910, 10,951 pupils of high-school age (14–18[1]). The increase in total school census for 1915 over 1910 is about 9 per cent. Using this as a basis of estimate, there were in Wyoming the present year 11,937 children of high-school age; 2,912 of these are enrolled in high schools, leaving a remainder of 8,925 children of high-school age not enrolled in high schools. While this, of course, is only an estimate, it is approximately correct.

So far as can be ascertained, vocational subjects in the Wyoming high schools receive little attention. Here and there attention is given to fitting boys and girls for a place in industrial life and an effort made to give some kind of vocational guidance, but no systematic State-wide effort is being made either to encourage a greater number of high schools or to assist in bringing those which now exist nearer to the industrial interests of the people. More high schools are needed, and they should be located in such a way as to serve the largest possible number of children. The courses of study need revision, particularly with respect to vocational training. High schools should file separate reports with the State and county superintendents. The State department of education should be equipped to have general supervision over the high schools and to give them advice and assistance.

TEACHING CORPS.

The most important consideration in the efficiency of any school is the teacher. If she is well qualified for her work, trained, experienced, and capable, many handicaps can be overcome. This is especially true in the rural schools. As the teacher, so is the school. Few, if any, interfere with her sway. She makes the course of study, outlines the program, selects the books, often without restraint or advice, and is the organizer and general administrative officer of the classroom. These responsibilities demand ability of a high order and such academic and professional training as give preparation proportional to the importance of the work pursued. It occasionally happens that teachers are "born;" that is, one of unusual native ability becomes a successful teacher through experience rather than through special preparation. Probably, however, the percentage of born teachers is as small as the percentage of born doctors, lawyers, or ministers. There is now general agreement among educators and laymen that the best assurance of good teaching consists in adequate preparation on the part of the teacher.

The training of the teacher is usually thought of as made up of two elements—general or academic education and special or professional training. In addition, a study of the qualifications of the

[1] Inclusive.

teaching force should consider such professional activities, graduate study, summer-school attendance, educational reading, etc., as show a progressive attitude and a professional spirit. Experience is another important factor. In order that the teaching body may be a homogeneous group with certain standard qualifications, most States have some system of certification by which the teachers are classified according to educational qualifications, generally measured by (1) examination or (2) evidence of graduation from schools of specified class and standard. The teaching force of Wyoming has therefore been considered (1) as to certification, (2) as to general education, (3) as to professional training and experience, and (4) as to professional spirit as evidenced in the manner above suggested.

Certification.—The State of Wyoming recognizes eight different kinds of teaching certificates, obtainable either on examination or on satisfactory evidence of graduation from approved schools. Legally the holders of higher-grade certificates have no advantage in appointment or salary over holders of lower-grade certificates. Briefly, the qualifications represented by both forms are as follows:

TABLE 6.—*Requirements for teaching certificates.*

Class of certificates.	Requirements by examination.	Requirements by credentials.
(1) Third-grade certificate (valid one year, not renewable).	The common branches, including no high-school subjects, but including agriculture, Wyoming and United States civics, and obtaining an average of 70 per cent; no subject lower than 50.	Graduation from a four-year high school.
(2) Second-grade certificate (valid two years; renewable for two years by reading-circle work).	Rhetoric and composition, and the theory and practice of teaching, in addition to examinations required for third-class certificates.	Graduation from a four-year high school, with 18 weeks' additional work at a standard normal school.
(3) First-grade certificate (valid four years, renewable for four years by reading-circle work).	Algebra, English, and American literature, elementary psychology, physical geography, and two additional high-school subjects, in addition to examinations required for second-class certificate.	Graduation from a four-year high school and an additional full year at a standard normal school.
(4) Professional second-class (valid for life).	School management, pedagogy, methods, and history of education, the subjects required for a first-class certificate, and two additional high-school subjects.	Graduation from a regular two-year normal school, with one year's experience in teaching.
(5) Professional first-class (valid for life).	Issued to holders of professional second-class certificates on passing additional examinations in advanced psychology and school supervision, after three years' successful teaching experience.	Graduation from the college of liberal arts of the State university or institution of the same standing, provided one-fifth of the course pursued was in education, and two years' successful experience in teaching.
(6) Diploma certificate.....	Issued to graduates of the State normal school or the State university and held while gaining experience required for the above professional certificates.	
(7) Special certificates.....	Issued to primary, kindergarten, and special technical teachers upon credentials or examinations.	
(8) Temporary certificates..	Issued to persons engaged to teach, but hold no certificate in force, but who have at some time held a teaching certificate. Requests must be indorsed by county superintendents and show "good and sufficient reasons." They are good legally only until next regular examination.	

It is evident that the two requirements for the same certificate, one by examination and one by presentation of satisfactory evidence of graduation from specified schools, are not equivalent. For instance, the lowest certificate (the third-grade certificate) requires

graduation from a four-year high school, if obtained by credentials, but it may be obtained on examination by a person with no high-school education. The first-grade certificate requires graduation from a one-year standard normal school on credentials, but it may be obtained on examination by high-school graduates who have studied outside of school certain professional works on education. In fact, a study of the education of the individual teachers now holding first-grade certificates shows many with no education beyond high school, and a large number with even less general education.

As stated in a previous section, all kinds of certificates are issued by the State superintendent of public instruction on the recommendation of the State board of examiners, which consists of three members appointed by the State superintendent of public instruction from among high-school principals, city and county superintendents of the State, and the faculty of the State university. This sort of board was undoubtedly satisfactory when the number of teachers in the State was much fewer than at present. Now, however, that the work is more arduous, it is difficult to find education officers who can give enough time to the work to assure promptness in correcting examinations, passing upon credentials of education, and issuing certificates. Many complaints have been received because teachers are required to wait a seemingly unreasonable time for their certificates. Greater satisfaction would undoubtedly result if the board were abolished and a division of certification, with a permanent chief, created in the State department of education.

The following table shows the kind of certificates held by all teachers in the State at the end of the school year 1914–15, as taken from the records of the county superintendents, and those held by 1,077 teachers at work in the fall of 1915 as reported to the State department on the special inquiry for information for this report. It is interesting to note that while there were 10 per cent of the teachers without regular certificates in October of the year 1915, there were only 2 per cent the preceding spring. It indicates that a large number of teachers holding no certificates are employed each fall in the expectation that there will be no difficulty in securing certificates later.

Certificates of teachers in 1914–15.

Kinds of certificates.	Spring of 1915.	Fall of 1915.
	Per cent.	*Per cent.*
First professional certificates	6.4	7.4
Second professional certificates	16.8	20.2
First-grade certificates	16.5	13.4
Second-grade certificates	44.6	32.5
Third-grade certificates	10.4	11.2
Diploma certificates	2.5	1.7
Special certificates	.0	3.7
Temporary certificates	2.3	3.0
Those not reporting any grade of certificate	.0	6.9

The figures for the fall of 1915 show that more than half of the teachers of the State reporting hold either second or third grade certificates or none at all and 10 per cent hold temporary certificates or none. The first-grade certificate, held by 13 per cent of the teachers, is not a high grade of certificate, especially when obtained by examination. None of these three grades of certificate when obtained on examination necessarily represents any professional training worth while. Nearly 60 per cent of the total number of certificates issued during 18 months preceding June, 1916, were issued on examination. Data showing the exact number of each grade issued in this way are not available. However, of the 40 per cent issued on credentials, a large number were given on high-school diplomas and represent no professional training. Only 29 per cent of the total number of teachers now in the State (diploma and first and second professional certificates) hold certificates representing worthy attempts toward preparing for their chosen profession, and this 29 per cent in reality should be reduced by the consideration that a large portion of them were obtained by examination.

It is obvious that the professional status is low. It can be raised by legislation requiring of all teachers after a certain date, say 1922, a definite amount of professional training as a prerequisite for any type of certificate. This plan is being adopted in other States, and seems to be necessary, if trained teachers are to be secured.

Another point relating to certificates is noteworthy in these figures. Three per cent of the total number of teachers included in this report (1,077) hold temporary certificates, and 7 per cent held, at the time the questionnaires were sent out in October, none at all. Taking this as a basis of computation, it would appear that about 50 teachers in the State hold temporary certificates and more than 100 none at all. That is, approximately 150 teachers (or 10 per cent of the total) were teaching in the month of October holding no legal papers authorizing them to draw their salaries. The blame for this condition must be distributed among three classes of people, namely, the teachers themselves, those who employ them, and the State board of examiners. To remedy this, it should be illegal, as it is now in many States, for any teacher or any employing board or officer to enter into a teaching contract until the teacher holds a certificate.

A very interesting fact uncovered by this investigation is the surprising variation among counties as to the grades of certificates held by teachers. The county reporting the highest percentage of life certificates is Natrona, the percentage being 41.8. The one showing the lowest percentage (Campbell) reports no teachers holding life certificates. Thus we have a variation in the number of life

certificates ranging from 0 in one county to 41.8 per cent in another. Likewise the variation in third-grade certificates (the lowest class of certificate) runs from 0 in Washakie to 25 per cent in Campbell. Similarly the average number of years of professional training varies from two-tenths of a year in Campbell to 1.9 years in Hot Springs County. No teachers holding degrees are reported in Big Horn, Crook, Niobrara, and Hot Springs, while Laramie County, containing the city of Cheyenne, excels on this point.

Variation in grades of certificates among counties.

	Per cent.
Largest percentage of life certificates, Natrona County	41.8
Smallest percentage of life certificates, Campbell County	0.0
Largest percentage of third-grade certificates, Campbell County	25.0
Smallest percentage of third-grade certificates, Washakie County	0.0

What is the cause of this rather striking variation? Professional schools for teachers as at present conducted do not prepare for rural-school work; hence trained teachers gravitate to the city. But the matter must also be traced largely to those who select teachers. In the four or five largest towns or cities in Wyoming the power to select teachers is usually given to the city superintendent. In small towns and rural schools the boards still perform this function. The table shows, for example, that the county in which Casper is situated, and in which there are few small town and rural schools, has a high percentage of life certificates. Sheridan County (containing the city of Sheridan) reports 110 teachers, 42 of whom hold life certificates and only 10 of whom hold third-grade certificates. Laramie County (containing Cheyenne) shows 46 life certificates out of a total of 123 certificates and only 7 third-grade certificates. The conclusion is inevitable that wherever the power of selecting teachers is left to the proper supervisory officer, instead of to school boards, much better teachers will be found. This is but natural. In many States county boards of education and county superintendents must approve all teachers appointed before the district receives any portion of the county funds.

General education.—Ability to teach can be judged better from the applicant's education and training than from the grade of certificate held. Too many elements of chance enter into the examination method of judging qualifications, and too much encouragement is given by such a system for cramming subject matter at the expense of time which could be spent better in preparation for work in the schoolroom.

An attempt was made to obtain information giving the exact education, both general and professional, of every teacher in the State; however, only 66 per cent replied, and in many cases the returns on normal and college training were so indefinite that it is

impossible to say whether the work reported was done in standard normal school or college courses or in preparatory department courses. The following table gives the number of the 1,077 reporting who had elementary education only, partial secondary education, and complete secondary education. Many of those with complete secondary school work went to normal school or college; 495 reported that they had attended such institutions, more than the number reporting attendance at high schools; many of these did not report whether or not they had any secondary school work. In such cases their so-called college work was in fact secondary work. Many normal schools in the United States and many institutions known as colleges require little or no high-school work for entrance.

General education, elementary and secondary.

	Number.	Per cent.
Total number of teachers in State	1,633	.....
Total number of teachers reporting	1,077	.....
Teachers having elementary education only	70	6.5
Having some secondary, averaging in amount 2.2 years	273	25.3
Having some secondary, amount not reported	297	27.6
Full 4-year secondary (including those who have additional college training)	437	40.6
Total	1,077	100.0

Professional training and experience.—Fifty-four per cent of the total number of teachers report no professional training of any kind. This shows a lower percentage of professionally trained teachers than exists in many other States. Those reporting professional training did not in all cases designate the amount. They reported, however, attendance in courses which included professional education in normal schools and colleges as given below. It must be clearly understood that the institutions attended were not institutions necessarily requiring any high-school education for entrance; they include all kinds, from those that require none to those that require the full four-year high-school course.

Professional training.

Training.	Number.	Per cent.
One year (normal or college)	153	14
Two years	162	15
Three years	58	5
Four years or more	122	11
Reporting none or not reporting	582	54
Total	1,077	99

From these figures it is a fair inference that at least half of the teachers of the State have not completed a high-school course, and many have gone into teaching directly from the eighth grade. If reports had been obtained from all teachers, the percentage with less

"LONE STAR SCHOOL," DISTRICT NO. 1, SHERIDAN COUNTY.

DIFFICULTY GRAMMAR SCHOOL, DISTRICT NO. 32.

GRAMMAR SCHOOL, BASIN, WYO.

HIGH SCHOOL, GUERNSEY, WYO.

than a full high-school education and the percentage with elementary education only would probably be greater. Experience in collecting information from teachers in other States, particularly that relating to their education and training, shows that a larger percentage of those with poor training fail to reply than of those with good training.

A remedy for this condition in the general education of teachers is to make a four-year high-school course a prerequisite for examination for all grades of certificate and for entrance to all teacher-training courses. While this arrangement might seem to be inexpedient, because of the difficulty of obtaining teachers with higher standards than those at present employed, other States which have by legislation established such a standard as described above find that the supply rises to the demand in a few years.

While experience does not compensate for lack of professional training, it is evident that, other things being equal, a teacher without experience is not so well qualified as a teacher who has had successful experience. If the experience is obtained in a well-organized city system under expert supervision, it is of greater value than if obtained in rural districts without this advantage. However, experience without supervision is a factor in the efficiency of the teacher. The complete data on experience compiled from the replies to the questionnaires are somewhat unreliable, a few teachers having misinterpreted the question. According to it, of the 1,077 teachers, nearly 200 were teaching their first year. The remainder report experience varying from 1 year to 40 years, the average of those so reporting being 5 years. When extremes are so great, it is obvious that an average means little. Statistics are given concerning the teachers in one county which are far more accurate and are probably typical of conditions in the majority of counties in the State. This table shows that more than half the teachers have had no previous experience and that only a very small percentage, about 9, have had three years' experience or more. Three years may well be considered as the smallest possible amount of time necessary before one may be classed as following teaching as a serious life business.

Experience of the teachers of one county in Wyoming.

Experience.	Number.	Per cent.
Number of teachers in Laramie County	123	.....
Number teaching first year	67	54.4
Number teaching second year	27	21.9
Number teaching third year	20	16.3
Number teaching fourth year	3	2.4
Number teaching fifth year	2	1.6
Number teaching sixth year	1	.9
Number teaching seventh year	2	1.6
Number teaching more than seven years	1	.9

Progressiveness and professional spirit.—The table at the close of this section shows data concerning summer school and correspondence courses and professional reading. Such items measure somewhat the teachers' ability to progress and to retain a professional attitude toward her work. The majority of the teachers in Wyoming do not attend summer schools; only 6 per cent of those replying report attendance at one or more. The actual total number is undoubtedly somewhat greater. About 6 per cent of the total number reporting had taken some correspondence work; 16 per cent had read no professional books, 35 per cent had read three such books, and 32 per cent had read fewer than three books; only 8.6 per cent of the teachers report that they read professional magazines. It can not be concluded that this lack of professional spirit is confined to immature and untrained teachers. Teachers who hold normal-school diplomas often look upon them with a satisfied sense of finality—in fact, the problem of training teachers is probably matched by the equally great one of keeping them in training. Perhaps the only remedy for this is professional supervision. This is treated in a later chapter. In addition, renewal of certificates should probably depend on evidence of professional progress, as shown by the completion of reading-circle work, success grades given by the supervising officer, or by some similar requirement.

The following table is a summary of the data relative to the 1,077 teachers reporting on the various items discussed in the preceding pages:

TABLE 7.—*Data concerning Wyoming teachers.*

		Number teachers in county, 1914-15.	Number teachers reporting.	Average age of those reporting age.	Number married.	Single or widows.	Number of grades per teacher.		Number teaching in 1-teacher buildings.	Certification.								General education, elementary and secondary.				Number of teachers with degrees from college or normal schools.	Professional training.		Correspondence courses.	Professional reading—number who read during year.				Number reading professional magazines.	Experience.			
							City.	Rural.		First professional.	Second professional.	First class.	Second class.	Third class.	Diploma.	Special.	Temporary.	Elementary school only.	Some secondary, but less than 4 years.	Some secondary, but amount not reported.	Four years, secondary.		Attendance in college or normal schools 1 to 4 years.	Number having attended summer schools.		No book.	1 or 2 books.	3 books.	3 or more books.		Teaching first year.	Teaching second year.	Teaching third year.	Teaching 4 years or more.
1	Albany	133	0	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
2	Big Horn	74	63	26	16	47	1	5	11	2	4	8	21	12	1	4	9	13	20	1	29	....	4	....	27	0	18	42	3	46	19	10	9	25
3	Campbell	38	12	24	1	11	2	5	23	....	....	2	7	3	....	....	....	1	1	5	5	4	28	....	0	1	6	5	0	8	5	2	1	4
4	Carbon	80	66	25	8	58	1	7	20	8	12	14	16	6	1	2	7	2	18	17	29	8	45	10	2	13	24	12	17	1	11	10	8	37
5	Converse	44	28	24	2	26	2	7	18	5	5	2	9	4	3	....	....	0	5	3	20	3	11	2	0	7	10	4	7	1	6	4	7	11
6	Crook	116	23	23	3	20	3	5	20	2	2	3	10	5	....	....	1	3	11	4	5	....	11	....	0	7	6	6	4	0	6	7	4	6
7	Tremont	89	89	26	20	69	2	5	53	7	11	11	30	11	1	4	14	2	20	31	36	8	31	9	2	14	32	24	19	3	12	18	10	49
8	Goshen	84	54	26	15	39	2	6	52	2	5	9	24	6	....	1	7	1	15	10	28	6	18	5	1	12	18	15	7	0	10	11	8	25
9	Hot Springs	35	29	28	6	23	1	6	15	3	8	2	9	2	....	2	3	0	10	9	10	....	19	1	0	4	11	8	6	0	5	2	0	22
10	Johnson	144	31	25	4	27	2	5	20	1	5	3	13	7	....	2	....	2	7	9	13	2	12	....	3	9	9	9	4	1	8	4	4	15
11	Laramie	174	123	26	18	105	1	6	52	8	38	9	46	7	3	7	5	9	29	44	41	16	74	11	6	23	36	42	22	22	13	18	11	81
12	Lincoln	129	62	28	9	53	1	6	18	6	20	10	16	2	4	2	2	2	14	24	22	4	35	1	3	15	22	12	13	0	13	8	13	28
13	Natrona	54	49	25	6	43	1	5	17	4	17	8	8	4	0	2	6	0	7	16	26	5	33	4	1	9	13	18	9	1	9	6	7	27
14	Niobrara	48	10	27	4	6	2	6	7	....	1	1	4	1	....	....	3	1	3	5	1	....	5	1	1	0	9	1	0	0	4	2	2	2
15	Park	157	51	26	11	40	2	6	25	3	3	5	15	11	1	....	12	2	16	21	12	2	27	5	0	6	14	13	5	2	10	4	9	28
16	Platte	112	104	25	11	93	2	5	73	4	12	12	48	15	....	2	11	7	31	33	33	8	20	8	1	21	32	36	15	0	23	16	17	48
17	Sheridan	119	110	27	6	104	2	5	43	7	35	14	24	10	1	10	9	21	26	0	60	1	62	....	11	3	12	79	16	0	15	6	5	84
18	Sweetwater	66	57	25	7	50	1	7	15	6	18	8	14	5	1	1	4	0	14	17	26	6	25	3	3	13	28	8	8	1	9	12	8	28
19	Uinta	59	54	26	6	48	1	6	15	6	12	6	18	2	2	1	7	2	10	23	19	7	17	4	0	12	16	21	5	4	10	9	6	29
20	Washakie	26	24	26	4	20	1	5	16	3	2	10	7	....	....	....	2	0	6	9	9	3	5	....	0	1	6	14	3	2	3	2	5	14
21	Weston	54	38	27	7	31	2	5	18	3	7	7	11	7	....	....	3	2	10	16	10	4	13	3	1	9	15	9	5	1	7	5	5	21
	Total	1,633	1,077	....	164	913	....	....	541	80	217	144	350	120	18	40	105	70	273	297	437	87	495	67	64	179	337	378	170	93	198	156	139	58
	Per cent	.....	66.0	....	15.2	84.8	....	....	50.2	7.4	20.1	13.4	32.5	11.2	1.7	3.7	9.9	6.5	25.3	27.6	40.6	8.0	45.0	6.2	6.1	16.6	31.7	35.6	16.1	8.6	18.4	14.5	12.8	544

Provision for teacher training.—At present the university is the only institution in the State preparing teachers for service in the public schools. The total enrollment in the normal-school department and college of education of the University of Wyoming for 1916 was 57. In 1914 there were 16 graduates from these two departments, 11 prepared especially for elementary and 5 for high-school work; in 1915 there were 15 graduates, 9 prepared for elementary and 6 for high-school work; in 1916 there were 23 graduates, 17 with preparation for elementary schools and 6 for high schools. Other graduates of the university are prepared to teach. The following is quoted from President Duniway:

> Under our system graduates of the college of liberal arts who have taken requisite courses in professional education are equally entitled with the graduates of the college of education to teach in Wyoming schools. As a matter of fact, in 1916, six of the graduates of the college of liberal arts have been teachers or have prepared to be teachers. Furthermore, under our system the six graduates of the department of home economics have all been trained specifically to be teachers of home economics in high schools. * * * If we go beyond the matter of graduation, a great deal more in the way of teacher-training work is done by the University of Wyoming through its college of education. A considerable number of teachers take a course of one year and therefore do not graduate. A very much larger number come to summer schools or take correspondence study courses in professional subjects.

It is evident that the State is preparing a very small number of teachers for a Commonwealth with over 1,600 teachers in service. Unfortunately, data received from the teachers is too indefinite to make possible an accurate statement of the exact number of new teachers necessary each year to recruit the ranks of the teaching staff. The approximate number may be estimated, however, from experience in other States. An analysis of practically complete reports from the State of North Dakota shows that the average length of service of rural teachers in that State is two years; of those in cities and towns, five and one-half years. An estimate may be made also from the experience data of one county in Wyoming given on page 49 and from the results of the study of instruction in three counties given elsewhere in this report. From the first of these it appears that 54 per cent of the teachers in the county studied are inexperienced, and from the latter that 70 per cent of the teachers are employed for the first time in their respective districts. It is probable that, estimating very conservatively, one-fourth of the 1,600 teachers change each year. The State therefore undoubtedly requires not less than 400 new teachers each year. From the studies made it appears that not more than half of this number can be expected to come from other States. This leaves on the State of Wyoming the burden of preparing at least 200 teachers each year. At present it prepares from 15 to 20 per cent of that number.

As pointed out elsewhere in this report, untrained teachers are rarely able to conduct an efficient school. It may be reasonably expected that so long as such teachers are employed the money spent on schools is in a large measure wasted. The State must devise some means of offering professional training within reach of young people who desire to become teachers in order that the supply of adequately trained persons will at least approach the number demanded by annual changes in the force. It may be possible that the university, which is at present the teacher-training institution for the State, can make such adjustments as will enable it to meet this difficulty. But the committee, remembering the urgency of this need, and keeping in mind that it is the paramount duty of the State to remedy present conditions, must recommend a solution either through the university itself or by establishing additional normal schools to be conveniently located in different parts of the State under the management and direction of the State board of education.

INSTRUCTION.

It is recognized in the compilation of this report that no phase of school efficiency is more difficult to evaluate fairly, and that none is more difficult to express in terms which have real significance to the general observer, than the quality of the instruction. To visit every teacher in the State would be as easily possible as to judge fairly the work by such visit. It is possible, however, to make a reasonably careful study of relatively small territories more or less typical of general conditions in the State; and it is fair to assume that what is true in these sections will be a fair criterion by which to measure conditions throughout the State where in general the governing factors are similar. It is also possible to lay down certain necessary principles of instruction and certain defects in teaching which are so obvious and whose recognition is so widespread that, unless the former are adhered to and the latter avoided, only inefficiency can result. A large number of teachers in three widely separated counties were carefully observed by members of the committee and a representative of the bureau after certain well-defined principles of judgment had been agreed upon. Only the more obvious and generally accepted of these principles will be discussed.

Personality.—It is generally conceded among educators and laymen that a teacher, in order to be successful, should have certain personal qualities which help her to be an inspiration to the pupils and an example worthy of emulation, at least in so far as academic matters, such as the correct use of English, and general matters, such as good health, neatness of person, and similar factors, are concerned; similarly, that she should be an active and sympathetic member of

the community in which she teaches, and should possess some qualities of leadership, at least sufficient to arouse interest in the school and make it something vital and positive to the community. This attitude may be shown in different ways—in the organization of boys' and girls' clubs, literary societies, and playground activities. The rural-school teacher ought to be far more a leader in the community than is here suggested, but at least this minimum may reasonably be required. It represents only the essentials, if the teacher is to have the respect and influence necessary to make her school worth while. It may be said of the teachers visited that they were in almost all cases young men or women physically fitted for their work, careful about personal neatness, habits, and manners, and conscientious in their desire to give good service. Unfortunately, when judged in regard to community service, such favorable conditions are not apparent. In not more than 10 per cent of the cases investigated was there any marked indication of leadership. Generally the attitude of the teacher is negative or at least passive. He or she considers that the four walls of the schoolroom should bound the legitimate activities of the teacher and the school. The school is an isolated institution, rather than a vital part of the community's life. The teacher comes into the community for a year, is a passive observer only, then moves on to another field, with no apparent desire to enter into the life of the people or to exert any influence more lasting than is left by the routine work of the schoolroom.

It must not be supposed that this unfortunate condition is always the fault of the teacher. There are factors governing the matter which only strong personalities can overcome. These lie dormant in the system itself and must be eliminated before the resulting conditions can be improved. Those relating to administration will be discussed later; it is sufficient to say here that living conditions and the existing method of selecting teachers are very potent factors. Of the teachers now under discussion, 70 per cent are teaching their first year in the district—an indication of a condition of constant change which makes real community interest and understanding quite out of the question. Nearly half (47 per cent) come from outside the State of Wyoming, and only a relatively few (less than 30 per cent) live in or near the district in which they teach.

Living conditions in the particular sections under consideration are better than in many of the more isolated and poorer districts in counties other than those visited. Yet 25 per cent have either no rooms of their own or no suitable place where they can retire, in comfort and quiet away from the family, for such study and preparation for school work as even well-trained modern teachers find necessary. Such conditions, for which the teachers are not immediately responsible, are not conducive to efficiency. No one does good work until

living conditions are such as make for contentment, comfort, and happiness in one's work.

Again, the teacher can not create the community life, nor is it possible for her to play her own part in activities when the community itself is indifferent. There is practically no evidence of organized interest in the rural schools in the counties studied. While there are a few organizations, such as farmers' unions, the grange, women's clubs, and parent-teacher organizations, none of them are reported as cooperating helpfully for school improvement in the schools visited. In many places in the State they do cooperate, according to the statement of the State superintendent. In the particular communities under consideration such gatherings as are held in the schoolhouse—socials, dances, church, and Sunday school—are entirely isolated from school interests. This use of the schoolhouse is good, but it does not go far enough; it does not make the school the community center. In communities in which the people are indifferent the school directors are not as actively interested in school progress as they might be; they are indifferent to the general appearance and cleanliness of the house and grounds, and are parsimonious in supplying equipment. The majority of directors of the schools have children of their own in the school. Their immediate welfare, therefore, is concerned, yet two-thirds of them are reported as indifferent by the teachers. Their attitude is due not only to indifference, but to absorption in other interests and to a lack of knowledge as to what constitutes a good school. These conditions all have direct bearing on the attitude of the teachers and pupils, the discipline of the school, and the place of the school in the opinions and interests of parents and children. So long as these conditions are unchanged, the teachers, even if well qualified and experienced, will be handicapped in conducting efficient schools.

The teacher's ability to instruct.—Ability to instruct is governed by two main factors—(1) the material offered, or content of instruction, and (2) the manner or method in which it is presented. Practically all of the teachers visited nominally use the State course of study, but in reality they follow quite literally the arrangement of topics set forth in the particular text in use rather than the course of study. Since there is very little uniformity of books, there is also little uniformity in the work or in the grading. This is inevitable in a system in which each school is under the administration of a separate board of trustees. Each individual district is an entity in itself; the only connecting link is the county superintendent, and, as pointed out elsewhere, this official has under the present system practically no authority.

Legally the textbooks are selected by the board of trustees; in practice the teacher usually makes the selection. Some districts change books as often as they change teachers, generally annually: while in others, where the directors are either less accommodating or less generous or, as sometimes happens, have distinct opinions of their own, the books are rarely changed at all. Of course some county superintendents prevail upon school directors to select books in such a way that there is some uniformity in the county, and in like manner guide the teachers to follow an outlined course, but this is by no means universal. A study of the content of courses of study for the State, therefore, would mean practically a study for each particular district.

Since the schools visited were limited in number, only a few general conclusions will be drawn regarding the content of instruction. Modern practice in education assumes, since education is primarily for the purpose of preparing for definite life needs, that the subject matter of the curriculum should be closely related to the vocational life of the community and should be taught in terms that the children understand. For example, in rural communities arithmetic should not be presented through problems in shipbuilding or lumbering or manufacturing so much as through practical problems in farming, such as measuring the amount of hay in a stack, or computing the percentage of butter fat found in milk tested with the Babcock tester. Moreover, topics in the various subjects which have no relation to actual needs as represented by community interests—such, for example, as bank discount, cube and square root, in a farming community—are now omitted from the curriculum. These examples from arithmetic will serve to indicate what the material taught in this and other subjects should be. The survey committee finds little evidence of any effort to relate the subject matter of the course of study and textbooks to the life of the children. In geography, for example, the children were studying industries in the United States with little idea of what are the leading industries in the State of Wyoming. They were studying other States in the Union, but were unable to say whether these States are north, east, west, or south of the State in which they live. The arithmetic lessons observed were taken directly from the book, and the principles studied were not even illustrated in terms of familiar things. The history and geography consisted almost entirely of memorizing facts exactly as given in the book and then reproducing these in recitation. In this respect Wyoming country schools differ little from unsupervised schools in other States. Not all teaching was of this kind. One lesson in grammar will serve as an illustration, the exception. In this class the children were not learning rules or definitions from any book; they were simply learning to speak and write correctly short sentences and paragraphs concerning things with

which they were familiar. The cow one milked and cared for, the pet lamb another was raising on a bottle, are examples. Such work, however, was rare. At least 90 per cent of the teaching observed showed a blind following of the textbook.

There was similar lack of adaptation on the basis of different tastes, changing interests, and varied abilities of children. In reading, for example, successive lessons in the textbook were followed. One lesson as numbered in the book seemed to be the standard day's work. In some cases the children observed read fluently and understandingly and could very well have read another selection, or, better, could have found more material on the same subject from other books; yet when the lesson was completed, the children, without being directed to do so, went back to the beginning of the lesson and reread it. Evidently this had become the fixed plan and needed no explanation. In other cases the children read poorly and apparently with very little understanding of the content of the material read, yet the reading went on as before, each pupil taking his turn, being corrected in pronunciation now and then, but with no apparent effort made to enlist the interest or to consider the abilities of the children in any case. Similar work was found in spelling. The words in the book were followed whether they were such as the children used in their ordinary writing vocabularies or not. If the lesson in the book consisted of 10 words, 10 words were given out regardless of the difficulty of the words or of the ability of the children to learn more or less than a lesson of that particular length.

Methods.—Some idea of the teaching method will be gained from the foregoing. Indeed, content and method are so closely related that in any discussion they will of necessity overlap. Here again, only a few of the most obvious principles will be discussed. It is a well-accepted idea in education that the schools should develop power, initiative, judgment, ability to select the important and omit the trivial, should impart economical methods of study, ability to read understandingly and rapidly, and similar qualities which need not be enumerated here. These do not include mere memorizing of facts as set down in the textbook without regard to their use and as if all facts were of equal importance; though this was the kind of lesson heard almost invariably. If any effort is made in the schools visited to develop the abilities mentioned above, it was not apparent during the visits made, at least not in any but exceptional cases. Although there was every evidence that the children were unable to select important facts from the book and organize details in reference to these, not a single lesson was heard in which such organization was taught or suggested. Practically every class showed lack of ability to study intelligently; yet no study lessons were seen or reported. Questions were formulated directly from the book and were answered

either by yes or no or by a quotation from the text. Usually the questions were asked in the order in which they appeared in the book, and it was practically always necessary for the teacher to keep the book open constantly. It is uncertain whether this was in order not to omit anything in its exact book sequence or because the teacher was so unfamiliar with the text as to need the book for her own reference. Assignments were usually given as so many pages, occasionally so many topics, in the same order as given in the book, and showed neither thought nor preparation on the part of the teacher.

The teachers observed showed very little appreciation of the fact that the aim or purpose of a lesson should govern the way in which it is taught. Literature was oftener word pronunciation than a lesson for appreciation or joy in the reading. History was drill in facts or an exercise in memory more often than a study of life and institutions. In short, the recitations in general were merely question and answer methods of finding how familiar the children had become with the particular pages assigned in the textbook.

It should be added that here again, in method as in content, there are exceptions. Many teachers in Wyoming are doing excellent work. For example, one school visited presented an attractive appearance, of which any community might be proud. The teacher was teaching her third successive year in the district, was well trained, and had had successful experience elsewhere previous to her engagement in that district. The school was equipped with simple apparatus for manual training and cooking, placed inconspicuously in the rear of the room. There was every indication that the methods and discipline and influence of this teacher were without exception good. Only a few miles from this school is located one of the poorest of those visited in the county. Here was found an untrained, inexperienced, indifferent teacher; the house and grounds were dirty and in bad condition. There were no signs of orderliness or efficiency.

The difference between these two schools located so close together merely illustrates the fact that each individual district in Wyoming is a law unto itself, free to have as poor schools as the community will endure. There is no system of equality either of opportunity for the children or of expense in conducting the school for the patron. Doubtless the children in the latter district were much the same in all substantial ways as those of the former. Both will help to make up the citizenship of the county and the State.

Summary.—The constitution of the State of Wyoming guarantees an adequate education to *all*, not *some* of its children; yet glaring inequalities exist. Here and there may be found children attending good schools and enjoying the comfort, convenience, and benefit of modern equipment and competent teachers; but while these advan-

tages are available to a small percentage of the children, a great many (probably 70 per cent is a conservative estimate if the groups visited are any criterion) have none or only a few of these advantages, and such as they have are available not regularly, but only accidentally, during a year or two of their school lives.

These conditions can be remedied only by a systematic reform in several different directions.

(1) A better method of selecting teachers should be practiced, in order that educational qualifications and professional training may be given more consideration, and tenure during good service assured. It has been pointed out that lack of training on the part of teachers is obvious in the majority of the rural schools. Unless teachers have a general education at least four years in advance of the grades they are to teach, they can scarcely be expected to have broad enough foundation for satisfactory school instruction. Unless they are trained for the profession of teaching in the fundamental aims of education and how they are accomplished, as well as in the understanding of the physical and mental nature and interests of children, they are unable either to instruct pupils or to organize and discipline a school. In order to supply better trained teachers, the State must furnish better facilities than at present exist for training teachers, especially for work in ungraded schools. There are few cities in the State, and the rural teachers outnumber those of the cities greatly; consequently special training for rural work is the important need under existing conditions.

(2) The problem of supervision will be discussed later and need only be referred to here as a necessary factor in good instruction. One feels in visiting them that the teachers now in service would do far better work if they were directed by trained, experienced supervisors.

(3) Centralization of administrative authority is necessary. At present the selection of books, the outlining of the course of study, and the administration of other strictly educational matters are in the hands of laymen instead of experienced educators. The units of administration are too small and too widely scattered to make for system, uniformity, or efficiency. There should be a more detailed and better adapted course of study, and teachers should be taught the best methods of using it through preliminary training and through associations for training in service. More uniformity should be secured in the school books used, either through county or State adoption of textbooks.

(4) Better living conditions should be provided for teachers. Either teachers' cottages should be erected on the school grounds or living rooms should be provided as additions to schoolhouses,

unless satisfactory boarding places can be found in the homes of the people.

SUPERVISION.

It is not within the province or scope of this report to discuss the necessity of adequate supervision in school systems. It is sufficient to say that modern school practice assumes it to be a necessity, that practically all of the towns in the United States of 2,500 or over in population have provided for it, and that many of the progressive States in the Union have made or are making provision to extend such facilities to rural communities. Wyoming is especially in need of adequate supervision for its country schools, because there are so many inexperienced and untrained teachers employed, because teachers and schools are isolated by great distances, and because the teaching corps is largely recruited from outside the State. Such teachers need in a special manner professional advice and instruction to help them to organize and conduct schools successfully and to make such adaptations of school subjects to community needs as modern ideas of education demand. This direction only experienced supervisors—well-trained and mature persons familiar with the State—can give.

Such supervision as Wyoming rural schools have is now given by the county superintendents. The efficiency of county supervision is conditioned by many factors, a few of which will be discussed here. It is evident that the superintendent must be a mature and experienced person, trained for the particular field of supervision, if he is to be able to give expert advice to the teachers under his jurisdiction. It follows, then, that the manner of selecting the superintendents, the salaries offered, and tenure, should be such as to attract the most capable men and women to enter and remain in this field. These factors will be considered first.

Selection.—The county superintendents of Wyoming are elected by popular vote at the regular general election. The laws covering election, salary, powers, and duties of county superintendents were made many years ago. Not only conditions, but educational ideals and practice, have changed materially, and however well these laws may have answered at that time the purposes for which they were made, their adequacy is entirely outgrown at the present time. Education has now become an established profession; the county superintendent must be an educator, not a politician, and must be selected because of professional fitness. So long as he is elected at a general political election every two years, depending for success upon his ability to get votes instead of on his ability to supervise schools, the position will not appeal to many competent persons trained in the educational field.

Salary.—Another equally unfortunate factor—the salary—increases the difficulty of obtaining and retaining efficient superintendents. The constitution limits the salary of the county superintendent to $1,000 a year, and by legislative enactment which fixes the salaries all counties pay less even than this. Of the 21 superintendents in the State, seven receive $900, seven $750, and seven $500, the average salary for the State being $717 per year. Many teachers of the State receive more, and the anomalous situation of a subordinate receiving a higher salary than his supervising officer is not uncommon in Wyoming. The average salary of city superintendents in the six largest cities of Wyoming is $2,340.

Tenure.—The inadequate salary and the method of selection would alone be sufficient obstacles to securing competent superintendents, but the tenure is equally unsatisfactory. Good work is not always rewarded at popular elections. Two years is too short a time in which to carry out educational reforms, especially when the superintendent's function is advisory only, and these reforms must come about through his ability to persuade a large number of directors, three for each district, to adopt them. Even the misfortune of accepting persons not specially trained in supervision would be overcome in some degree if the incumbents of the county superintendencies remained long enough, so that experience in the position would compensate in some measure for lack of training. In actual practice, however, this does not happen. Of the superintendents replying to questionnaires sent out by the Bureau of Education, exactly one-half are serving their first term. A study of the records seems to show that the time of service is shorter in recent years than in the earlier period of Statehood.

TABLE 8.—*Length of service, in years, of county superintendents in Wyoming since January, 1891,*[1] *including term of present incumbents, ending Jan. 1, 1917.*

Counties.	Number years organized.	Number of different superintendents.[2]	Average tenure, in years.	Counties.	Number years organized.	Number of different superintendents.[2]	Average tenure, in years.
Albany	26	6	4.3	Lincoln	4	1	4.0
Big Horn	20	5	4.0	Natrona	26	10	2.6
Campbell	4	2	2.0	Niobrara	4	1	4.0
Carbon	26	5	5.1	Park	8	2	4.0
Converse	26	7	3.7	Platte	4	1	4.0
Crook	26	11	2.4	Sheridan	26	8	3.2
Fremont	26	7	3.7	Sweetwater	26	9	2.9
Goshen	4	1	4.0	Uinta	26	8	3.2
Hot Springs	4	1	4.0	Washakie	4	1	4.0
Johnson	26	9	2.9	Weston	26	7	3.7
Laramie	26	4	6.5				

[1] Wyoming became a State in July, 1890. The first county superintendents elected since that time took office January, 1891.

[2] These numbers are approximately correct. No records could be obtained for one 2-year period, and the names of one or two superintendents are not included in the report of the State department in several instances.

Training.—With all these adverse conditions, it would be strange, indeed, if Wyoming were able to secure for its county superintendencies many men and women professionally prepared for their work. The necessity for careful training and special preparation for supervisors and teachers both is now fully established in progressive communities. Teaching is a profession as well defined in its function as that of the law, medicine, or engineering, and one should as readily, and could as safely, trust an untrained person with the care of his ill child as with that child's training and education. Wherever adequate expert supervision is provided for rural districts, as in Ohio and in New England, in the small cities of the United States, and in the cities of the State of Wyoming itself, not less than eight years of secondary and higher education is considered necessary preparation for this work. Wyoming has not yet reached the place where training of this kind can be demanded or expected of rural supervisors. An earnest attempt was made to secure information from the 21 county superintendents now in office relative to their general education, professional education, and experience. The information was given by 16 of the superintendents. From the other 5 no answers were received, although three separate requests were sent, two from the Bureau of Education and one from the State superintendent's office. If experience in collecting similar data elsewhere is of any value the five not reporting are below the standards of the others in training and education.

The 16 report on general education as follows:

Elementary school only	3
Some high school, but less than four years	3
High school, but no further	1
High school and less than one year of college	6
High school and two years of college	2
High school and four years of college	1

Only a higher salary, assured tenure, a method of selection which will give consideration to educational qualifications rather than political ones, can be expected to improve this condition.

No consideration of the office of county superintendent is complete which does not recognize the difficulties of the work itself under existing conditions, regardless of the qualifications, salary, tenure, etc., of the persons selected. The size of the territory to cover, the number of buildings and teachers to visit, in conjunction with the traveling allowance and assistance available, are important factors in efficiency. Where there is a large percentage of inexperienced or untrained teachers, or where special difficulties are being met or experiments carried on, the superintendent must make frequent visits. If distances are great, as in Wyoming, assistants are necessary. The

counties in Wyoming vary in area from 2,000 to 12,000 square miles. The average size is 4,500 square miles. The number of teachers to be supervised varies from 26 to 130, averaging 55; and the number of buildings to be visited varies from 14 to 115, averaging 45. On an average the county superintendents in Wyoming pay one visit to each teacher a year, and the average time spent in each schoolroom each year is one and one-half hours. It would seem to be a physical impossibility for one superintendent to cover a territory af 12,000 square miles, visit 73 teachers in 50 different buildings, even if there were no further handicaps. Add to this the fact that the mileage allowance in the county referred to is small, entirely inadequate, indeed, to cover necessary expenses of travel, that no supervisory assistants are furnished, and the difficulty is practically insurmountable. Very few superintendents have an adequate mileage allowance. The system itself, which permits a board [1] not primarily interested in schools, the very nature of whose duties makes economy the desideratum, to fix the travel allowance, is sufficient evidence that a change is imperative. The county superintendent is the only person who can judge when and how often the schools should be visited. There is no possibility of visiting them too often under present conditions.

Some idea of the relative attractiveness as to salaries, number of assistants, tenure, etc., of the city and county superintendencies in Wyoming, as well as the probable efficiency of the teaching force supervised (and therefore the necessity of close supervision), as judged from educational qualifications in city and county, may be had from the following comparison. The statistics given represent the average in five of the seven cities in Wyoming which have a population greater than 2,500 in column marked "City" and the average for 16 counties in the State in the column marked "County." These include all the superintendents who reported.

TABLE 9.—*Comparison of statistics concerning county and city superintendents in Wyoming.*

	City.	County.
Average time in present position.....years..	6	2
Average number of assistant superintendents or supervisory assistants.....	4	0
Average number of teachers per supervisor.....	23	55
Average number of visits to each teacher by supervising officers (per year).....	50	1
Average salary of superintendent.....	$2,340	$743
TEACHERS.		
Minimum professional training required.....years..	2	0
Teachers engaged having professional training.....per cent..	92	[2] 40
Teachers having full 4 years of higher education.....do....	60	[2] 5

[1] Allowance for traveling expenses is made by the county commissioners.
[2] Estimated from tabulations made from reports of 1,000 teachers.

Summary.—It is evident that insufficient salary, uncertain tenure, the manner of selection, and size of the territory conspire to render real supervision a practical impossibility.

The county superintendent in an occasional friendly visit to the school can encourage and help the teacher and the pupils. He can inspect the building and grounds and often interview the directors and persuade them to do many things for the good of the school that would otherwise be neglected. There is no disposition to underestimate the benefit of such work, but it can not be classed as professional supervision. There is little reason to doubt the spirit, devotion, and conscientiousness which characterize the present body of county superintendents, but they are too much handicapped to do effective work.

Table 10 shows the maximum, minimum, and average salaries paid county superintendents in six Western States. These will offer a basis of comparison for salaries paid similar officers in Wyoming.

Table 11 is inserted to show what is possible in rural supervision when conditions as to selection, tenure, salary, etc., are such as to attract professionally trained supervisors. The counties are the first 16 counties in order on the tabulation sheets in the office of the Bureau of Education, and were compiled from reports sent in from the county superintendents.

In Maine the territory is small, enabling supervisors to visit frequently. In Ohio the assistant supervisors are numerous enough to insure adequate supervision, though the table does not show this in the number of visits made, because the system was just being inaugurated (under provision of a new law) when the reports were sent in.

TABLE 10.—*Salaries of county superintendents in 7 Western States reporting to Bureau of Education.*

States.	Maximum.	Minimum.	Average.
California	$4,000	$700	$2,200
Washington	2,100	700	1,280
Colorado	2,800	100	1,200
Utah	3,400	1,500	2,300
Nevada	2,000	2,000	2,000
Idaho	2,000	1,100	1,320
Nebraska	2,200	700	1,400
Montana	1,500	900	1,430
Oregon	1,800	1,200	1,500
Wyoming	**900**	**500**	**717**

DISTRICT SCHOOL, WARREN, MONT.

TABLE 11.—*Sixteen rural superintendents of Ohio, Maine, and Wyoming.*

[Includes all reporting from Wyoming and the first 16 in bureau lists from the other States.]

	Salary.	Education and training.				School buildings.	One-teacher building.	Teachers.	Area.	Assistants.	
		High school[1]	Normal.	College.	Degree.					Supervisory.	Clerical.
Ohio (County superintendents.)	$2,300	X	.....	X	A. B.	98	71	164	500	4	1
	3,000	X	X	X	A. B., A. M.	141	110	242	640	9	.....
	2,000	X	X	.....	A. B.	109	98	158	400	6	.....
	2,000	X	.....	X	B. S.	138	129	196	.....	4	.....
	1,500	X	.....	X	B. S., M. S.	180	170	188	625	6	.....
	2,000	X	.....	X	A. B., A. M.	84	63	150	400	4	.....
	2,500	X	.....	[2] 5 (S)	.....	130	120	217	325	10	.....
	1,200	X	.....	X	A. B.	90	75	240	1,200	1	.....
	1,900	X	.....	X	Ph. B., Ph. M.	103	82	173	401	6	.....
	2,000	X	.....	X	Ph. B.	.....	92	140	350	3	.....
	2,340	X	.....	X	A. B.	55	38	130	420	1	.....
	2,000	X	.....	X	A. B., A. M.	136	129	175	430	5	.....
	2,300	X	.....	X	A. B.	125	110	190	424	8	.....
	2,100	X	.....	X	A. B., A. M.	102	90	154	432	2	.....
	2,500	X	.....	X	A. M.	116	96	232	414	11	.....
	2,500	X	.....	X	A. B., A. M.	126	107	177	400	6	.....
Maine (Union district superintendents.)	1,550	X	2	X	A. B.	20	11	56	72	.....	.....
	1,550	X	.....	X	A. B.	23	11	45	100	.....	.....
	1,575	X	.....	X	A. B.	18	11	33	.....	.....	.....
	1,800	X	.....	2	.....	36	31	57	108	.....	.....
	1,200	X	.....	X	A. B.	18	12	28	108	2	.....
	[4] 1,500	X	.....	1½	.....	19	9	45	40	.....	.....
	300	X	.....	6	A. M.	9	5	15	60	.....	.....
	1,200	X	.....	5	A. B.	22	21	25	108	.....	.....
	[4] 1,750	X	.....	X	A. B.	14	9	31	45	.....	.....
	300	X	.....	8	A. B., M. D.	19	18	21	100	.....	.....
	1,300	X	.....	X	A. B.	25	19	29	.....	.....	.....
	1,200	X	2	1	B. Pd.	10	7	29	70	.....	.....
	1,225	X	X	.....	.....	46	41	59	216	.....	.....
	1,400	X	.....	X	Ph. B.	27	7	34	70	.....	.....
	1,510	X	[2] S	X	A. B.	20	7	32	60	.....	.....
	2,200	X	.....	X	A. B.	18	15	46	80	.....	.....
Wyoming (County superintendents.)	750	X	.....	.....	.....	29	15	61	2,000	.....	.....
	600	X	2	[2] S	.....	19	17	26	2,300	.....	.....
	900	2½	.....	[3] C	.....	61	36	120	12,000	.....	[4] 1
	750	X	X	¼	.....	40	25	78	2,880	.....	.....
	750	X	.....	X	A. B.	36	31	54	4,040	.....	.....
	750	X	.....	.....	.....	50	45	73	20,000	.....	.....
	600	1	.....	.....	.....	25	23	40	3,125	.....	.....
	600	.....	X	1	.....	130	126	140	2,800	.....	.....
	600	2	1	[2] S	.....	41	38	54	2,500	.....	.....
	900	X	.....	[2] S	.....	45	33	71	9,000	.....	.....
	600	.....	.....	.....	.....	40	38	87	2,100	.....	.....
	600	X	.....	2	.....	27	26	45	6,000	.....	.....
	900	X	.....	.....	.....	100	80	160	4,200	.....	[4] 1
	900	3	2	.....	.....	19	17	52	5,200	.....	.....
	600	X	.....	2	.....	19	16	37	1,800	.....	.....
	750	X	.....	.....	.....	38	35	57	4,900	.....	[4] 1

[1] Cross indicates full 4 years; figures, number of years if more or less than 4.
[2] S means attended summer school.
[3] C, correspondence work.
[4] Part time.

III. REVENUE FOR THE SUPPORT OF SCHOOLS.[1]

Wyoming is a State of scattered population and of rich and undeveloped resources. In the last decade vast mineral and oil deposits have been opened up. Irrigation and reclamation projects involving a large amount of capital have been initiated, railroads and auto roads projected, and a new era of development has begun. This has been accompanied by a corresponding increase in population. The United States Census reports of 1910 show a population of 145,965, an increase of 57.7 per cent over 1900, while the total increase for the United States was 21 per cent. Wyoming is, therefore, growing in population nearly three times as rapidly as the country as a whole.

The rural population of the State is correspondingly prosperous and growing and constitutes 65.7 per cent of the total population. The value of farm property increased during the 10-year period 1900 to 1910 approximately 148 per cent; 92 per cent of the total number of farms in the State are operated by owners, and 80 per cent of these owned farms are free from mortgage; 57 per cent of the total number of farms in the State are irrigated.

The percentage of increase in irrigation works, in the output of mines and wells, in manufacturing and industries, corresponds to the increase in farm values. Wyoming has no State debt, is prosperous and growing, and can provide liberally for the education of its children. It should take such anticipatory measures as will insure adequate facilities for the future, as well as for the immediate present.

The State has a higher property valuation per school child than any State of the North Atlantic, South Atlantic, or South Central groups; higher than four States in the Western group and higher than any in the North Central group except Nebraska, North Dakota, and Iowa. There are 269 adults in Wyoming to bear the expense of educating each group of 100 children between the ages of 5 and 18 years, a larger number than in any other State in the Union except California. Of adult men 21 years and over Wyoming has 179 for every 100 children between 5 and 18 years—more than any State in the Union except Nevada. A comparison of Wyoming with the States bordering it in these three particulars follows:

[1] Figures in this section were taken from the reports of the State superintendent of public instruction, the State auditor, special reports to the bureau made by county superintendents, and by a few district boards. The figures on Lincoln County were prepared by Supt. Burch, of Kemmerer, as were also some of those on other counties, the information resulting from a questionnaire sent by Mr. Burch for the committee to all county superintendents.

Value of property for each school child:[1]

Idaho	$5,900
Utah	6,300
South Dakota	7,500
Wyoming	**10,200**
Nebraska	10,700
Colorado	11,100
Montana	12,300

Number of adults for each 100 children 5 to 18 years of age:

Utah	160
South Dakota	175
Nebraska	182
Idaho	190
Colorado	231
Montana	261
Wyoming	**269**

Number of men 21 or over for each 100 children 5 to 18 years of age:

Utah	85
Nebraska	95
South Dakota	96
Idaho	113
Colorado	125
Montana	165
Wyoming	**179**

A growing and progressive, and therefore a rapidly changing State must look forward if it would be ready to provide for emergencies as they arise. Such anticipatory provision is especially necessary in considering financial support for public schools. In no particular is a rapid increase in population more noticeable or more difficult to provide for than in proper and adequate education. Wyoming has had this situation to meet, as may be seen from diagrams 1, 2, and 3, which indicate graphically the increase in attendance, the per capita expenditure, and the total expenditure. That the situation has not always been met satisfactorily has already been indicated in the section devoted to instruction and supervision. As was pointed out in that section, this is partly due to lack of adequate financial support, as well as to other causes mentioned.

Wyoming must provide, for the present at least, for conditions brought about by scattered population and highly differentiated local valuations. Rich coal region districts, containing valuable improvements, machinery, railroad terminals, etc., constitute a school unit immediately adjoining large tracts of unproductive land whose value

[1] This means that an average school district of 40 children in Idaho, for example, would have behind it property valued at $236,000, and 76 adult men and women, 45 of whom would be men 21 years of age and over. In Wyoming the average school of this size would have behind it property valued at $408,000, and 108 adults, 76 of whom would be men 21 years of age and over.

and corresponding assessable possibilities are negligible. It is evident that if local taxation alone is to be depended upon for school support there can be no equality of burdens for the tax payer except at the expense of school facilities. But education is a State function, as necessary to the preservation of the State's integrity and progress as are the capitol building and the legislature itself. The State must therefore devise means to equalize educational opportunity and expense within its borders. The legislature has made attempts to do this, notably in passing a law providing that districts receive $300 from the county for every teacher employed, regardless of the size of the district. Other steps in the same direction are necessary, however.

Sources of revenue.—The schools of Wyoming derive their support from three sources, the State school fund, the county general tax, and the special local levy. In addition there are rentals from forest reserves, the penal fund, and revenue from poll taxes. In this report these will not be considered separately, however, but as part of the special and county fund, nor will the expense of collecting and the loss from failure to collect the tax be considered.

Revenue from the State.—The permanent State school fund from the sale of school lands, escheats, forfeitures, grants, gifts, etc., amounts to $1,015,364.84. Approximately two-thirds of this is invested in school funds drawing 5 or 6 per cent interest, and about one-third is deposited in banks drawing 3 per cent interest. There are approximately 3,450,000 acres of land for the support of the elementary and secondary schools of the State. Approximately three-fourths of the yearly income from the State comes from the rentals of these lands. The total income for the year ended March, 1916, from the above-named sources (interest on permanent funds and rentals) was $332,132, or $8.39 per school child, there being 39,584 between 6 and 21 years of age in the State in 1915. Under Federal regulations 25 per cent of the money derived from leasing the forest reserve lands and the sale of timber thereon must be turned over to the State for the benefit of the schools and public roads of the county or counties in which the reserve is situated. The commissioners of the respective counties decide how much of this fund shall be used for each of the two purposes, 5 per cent being the minimum amount which can be used for either.

Revenue from the county.—The county commissioners of each county are required by law to levy a general county school tax sufficient to raise $300 for each teacher employed in the county, provided that for each teacher for which credit is claimed there is an average attendance of 6 in "grade schools"[1] and 10 in high schools, and pro-

[1] Interpreted by the Supreme Court not to refer to ungraded one-teacher country schools.

vided also that there is a minimum term of six months. It is the duty of the commissioners to levy a poll tax of $2 for each person between the ages of 21 and 50, to be used for school purposes only and for the exclusive use of the school fund in the district in which the same is located. All fines and penalties under the general laws of the State go into the public school fund of the respective districts.

Revenue from the district.—The property owners in a school district may, at the annual district meeting, vote a special tax of 3½ mills for school purposes. An additional amount not exceeding 5 mills on all the taxable property of the district may be voted at any regular or special meeting, provided 30 days' notice has been given.

Bonds.—The board of school trustees may submit to the property owners of the school district the question of authorizing the board to issue coupon bonds, not to exceed 2 per cent of the taxable property in the district, at a rate of interest not higher than 6 per cent, for a period not longer than 25 years, for the purpose of building schoolhouses and providing the necessary furniture or for refunding outstanding indebtedness.

INEQUALITY OF THE PRESENT SYSTEM OF TAXATION.

State support.—From the standpoint of a State the question of financing schools centers about these considerations: (1) Is the revenue provided sufficient to insure at least reasonable minimum school facilities? (2) Are the provisions for raising and distributing it equitable? (3) Are the several units from which funds come, State, county, and school district, all bearing their proper share of the burden?

That the first consideration is not satisfactorily met is apparent from the preceding chapters on instruction, supervision, and teaching corps. In addition it may be of interest to compare Wyoming with other Western States as to per capita expenditure and expenditure per $100 of assessed valuation. The following statement shows that in 1912–13 Wyoming spent less per capita of school population than eight other Western States. In 1913–14 an encouraging improvement was made, but the State is still near the bottom of the list. Later figures are not available.

TABLE 12.—*Per capita expenditures for schools.*

States.	In 1912-13.	In 1913-14.	States.	In 1912-13.	In 1913-14.
Wyoming	$31.37	$33.13	Nevada	$40.24	$40.72
Colorado	31.58	31.02	Washington	42.76	40.57
Utah	34.26	34.68	Montana	48.99	41.48
Idaho	36.11	33.71	California	49.28	49.58
Oregon	36.39	34.63			

The following table shows how much several Western States spent on education per $100 of assessed valuation. The figures are for 1912, the latest available. A comparison on *true* valuation is given elsewhere in this report. (See p. 94.)

TABLE 13.—*Wealth and school expenditure in 1902 and 1912.*

States.	Assessed valuation of all property subject to ad valorem taxation, 1912.	Expenditure for public schools, excluding debt paid, 1912.	Expended for public schools on each $100 of assessed valuation of all property.	
			1902	1912
			Cents.	*Cents.*
United States	$69,452,936,104	$482,886,793	66.6	69.5
Western Division:				
Montana	346,550,585	3,354,934	47.4	96.8
Wyoming	180,750,630	997,022	58.5	55.2
Colorado	422,330,199	6,527,569	87.6	154.6
New Mexico	72,457,454	1,112,840	62.4	153.6
Arizona	140,338,191	1,321,631	96.4	94.2
Utah	200,299,207	3,626,686	118.6	181.1
Nevada	101,087,082	625,562	71.4	61.9
Idaho	167,512,157	2,959,124	112.4	176.7
Washington	1,005,086,251	10,526,931	107.5	104.7
Oregon	905,011,679	6,095,111	121.7	67.3
California	2,921,277,451	23,978,621	59.0	82.1

The inefficiency of administration and the inequitable distribution of funds are responsible for much waste, and these administrative agencies are so closely connected with the financial agencies that it is difficult to differentiate clearly and show just how much is due to lack of economical administration and how much to insufficient funds. But the poor buildings and equipment, low salaries, etc., described in preceding chapters, indicate that, for the immediate present at least, more money will be needed to provide adequate educational facilities and that the State itself will need to aid more substantially than it has in the past. This may be justified on the basis of fairness as well as necessity, because of scattered population and because so much of the wealth of the State (coal and oil, for example) really contribute to State as well as to local prosperity. The exact methods of accomplishing this will be discussed later in the report.

The second and third considerations regarding the raising and distributing of the revenue will be more fully described under county and special taxation and will be referred to only briefly here. In a State in which the district system prevails, as in Wyoming, a just distribution of school expense is best attained when the State pays approximately one-third, the county one-third, the local district one-third. Many districts in the State have a low property valuation and a large school population, and even with a high special levy are unable to provide good schools. Other districts have a large valuation, few school children, and little or no special levy. The State, while assuming its share of educational burdens, must see to it that the local dis-

trict also does its share, and likewise the county assumes a fair share of the burden. Table 14 shows the percentage of total income received from each of the three different sources in all of the counties of the State. The State fund is now distributed on a per capita basis, and, as would be expected under such a system, some counties are receiving from the State a far higher percentage of their total school expenditure than others. Three counties receive one-third or over, two receive but one-sixth, and the others receive amounts varying between these extremes. Later in this report [1] it will be shown that the unfairness of distribution is even more marked when considered from a district standpoint than when considered from a county standpoint.

TABLE 14.—*Sources of school funds in Wyoming.*

Counties.	Amount received from—			Per cent received from—		
	State.	County.	Local.	State.	County.	Local.
Albany	$17,191	$31,863	$36,133	20.18	37.40	42.42
Big Horn	20,144	21,630	26,646	29.44	31.62	38.94
Carbon	17,560	23,462	26,567	25.98	34.71	39.31
Campbell	4,833	11,906	12,828	16.35	40,26	43.39
Converse	7,929	12,641	20,064	19.51	31.11	49.38
Crook	18,508	18,418	17,553	33.97	33.81	32.22
Fremont	15,429	24,977	23,494	24.15	39.08	36.77
Goshen	11,209	13,709	13,308	29.32	35.86	34.82
Hot Springs	5,663	4,080	17,437	20.84	15.01	64.15
Johnson	8,482	12,072	11,283	26.64	37.92	35.44
Laramie	34,793	55,079	65,973	22.33	35.34	42.33
Lincoln	36,253	36,695	27,453	36.11	36.55	27.34
Natrona	10,043	16,471	35,671	16.15	26.49	57.36
Niobrara	8,768	14,022	17,096	21.98	35.16	42.86
Park	12,392	16,660	25,902	22.55	30.32	47.13
Platte	13,265	26,695	33,149	18.14	36.52	45.34
Sheridan	34,407	35,275	62,711	25.99	26.64	47.37
Sweetwater	26,054	19,574	20,423	39.45	29.63	30.92
Uinta	15,655	18,150	28,746	25.03	29.02	45.95
Washakie	4,388	8,700	8,868	19.98	39.63	40.39
Weston	11,142	16,432	16,303	25.39	37.45	37.16
State	.....	.....	.....	25.31	33.22	41.47

It is obvious that when population is scattered, as in Wyoming, and ranches are isolated, there will be certain communities in which schools will have a very small enrollment. However, the expense of maintaining a school, including the salary of the teacher, is practically the same whether 5 or 25 children are enrolled, yet the one receives from the State approximately one-fifth as much as the other. Again, the State apportionment is made on a basis of district census, which includes all children in the district from 6 to 21 years of age. The expense of maintaining school is concerned only with those children between 6 and 14 [2] where elementary schools only are supported and those between 6 and 18 [2] years of age where there are high schools. There is no apparent reason for giving school money to young men and women who have finished school, some of whom are now married and have children of their own. Further-

[1] See tables concerning Lincoln county. [2] Inclusive.

more, distribution on a per capita basis has no educational significance, because it places no premium on local effort unless it stimulates each community to get names on the census list. The tendency is to cause districts to rely entirely on State and county funds, and to reduce salaries and term of school so that the total expenditure is within the amount so received.

An apportionment based one-half on number of teachers and one-half on the aggregate daily attendance would be a far more equitable one in Wyoming and would give individual communities an incentive to work for better school attendance and longer terms. Aggregate attendance is the average daily attendance multiplied by the number of days in the annual school session. There is the possible objection that such a distribution, if large enough to pay the entire salary of the teacher, may encourage districts to engage more teachers than are needed. This possibility would be avoided if funds were distributed to approved schools only, as suggested in another portion of this report.[1]

Not only is it good policy on the part of a State to encourage local initiative, but statistics given show that in Wyoming it seems absolutely essential to force certain backward communities to assume a just share of educational expenditure. Seventy per cent of the counties in the State contain some districts which make no local tax levy; on the other hand many communities with low taxable valuation and a large number of children enrolled in school are paying a very high levy and still are unable to provide satisfactory school facilities. The State could profitably increase its school fund by a special State tax. Part of this should be added to the income of the permanent fund as already constituted and part should form a reserve fund under the jurisdiction of the State board of education. This reserve fund should be apportioned to deserving districts for certain needs which can not be met locally when the maximum special levy has been made. A considerable amount of this reserve fund should also be available for assisting schools which make special effort in any direction recommended by the State board—such as the establishment of secondary schools or the introduction of special subjects like agriculture, cooking, and sewing.

The advantages of State over county taxation are the same as those of the county over the district. By a partial pooling of effort, longer terms and better teachers can be secured throughout the State than if each district were left entirely to itself.

Perhaps all children can not have absolutely equal advantages, but it is the duty of the State to secure a certain agreed-upon *minimum*, and to encourage communities to extend their educational energies as far as possible to new and desirable undertakings. Such advan-

[1] See recommendations relative to county board of education.

tages as the State deems absolutely necessary it must require and must help the communities to finance.

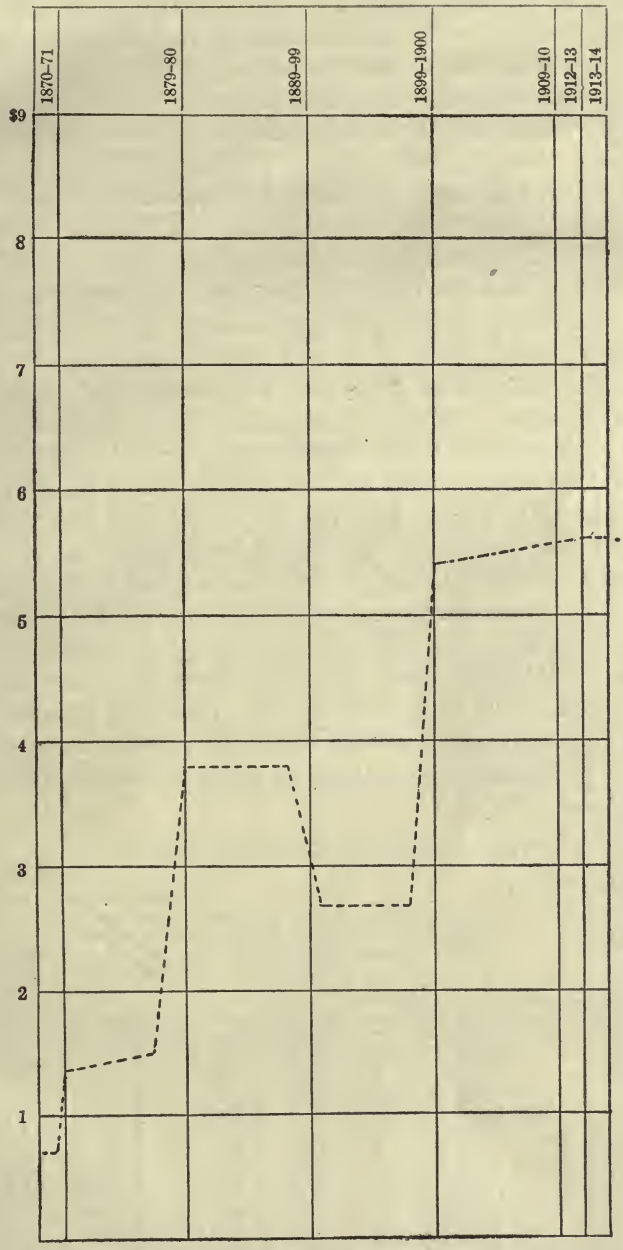


FIG. 2.—Increase in per capita expenditure of total population for schools in Wyoming, 1870–1914.

Other things being equal, in an equitably adjusted system (always omitting buildings and permanent improvements) the tax levy for

school maintenance should be approximately the same in all districts, and the income per school unit (that is, one teacher and the group of children under her charge) should approximate uniformity. In any classification made as to administration and taxation, these considerations, together with the fact that it is the paramount duty of the State to provide adequate education for all its children, should be carefully observed. It is important to see how nearly Wyoming approaches such a standard.

County and district support.—Table 15 shows the assessed valuation, county, general, and special local tax levies, census valuation per school child, and approximate State apportionment. It will be seen from this table that the different counties bear very unequal shares of total school expenditure through county general taxation and, consequently, must either have poor schools or force too high local levies on the individual districts. Presumably the county levies should be the same or about the same, assuming that valuations are equalized; yet as the table shows, they vary from 0.97 of a mill in Sweetwater County to the maximum of 3 mills in Big Horn, Crook, Goshen, Niobrara, Platte, and Weston Counties. The valuation of taxable property per school child varies from $2,783 in Crook County to $11,466 in Natrona County. This means that every school child in Crook County can draw on a valuation of $2,783 for the expense of its education, while every child in Natrona has a like income drawing possibility of $11,466. Since the State gives the same amount per capita in both cases, it is evident that either the education of the children in Crook County suffers materially, or the special tax rate must be approximately four times as great if the same educational advantages are offered.

TABLE 15.—*Income and tax rates, by counties.*

Counties.	Assessed valuation.[1]	School census.	Valuation per census child.	State apportionment.	General county school tax.[1]		Special school tax.[1]	
					Mills levy.	Amount of tax.	Average mills levy.[2]	Amount of tax.
Albany	$14,683,263	2,049	$7,117	$17,191	2.17	$31,862.68	2.743	$36,132.92
Big Horn	7,209,937	2,401	3,003	20,144	3.00	21,629.81	3.525	26,646.17
Carbon	16,069,704	2,093	7,678	17,560	1.46	23,461.77	2.530	26,567.23
Campbell	4,762,344	576	8,268	4,833	2.50	11,905.86	2.666	12,828.12
Converse	8,155,482	945	8,630	7,029	1.55	12,641.00	2.010	20,063.62
Crook	6,139,427	2,206	2,783	18,508	3.00	18,418.28	3.500	17,552.65
Fremont	10,407,092	1,839	5,659	15,429	2.40	24,977.02	2.744	23,494.39
Goshen	4,569,712	1,336	3,420	11,209	3.00	13,709.14	2.750	13,307.88
Hot Springs	4,080,902	675	6,046	5,663	1.00	4,080.90	4.340	17,437.11
Johnson	5,748,608	1,011	5,687	8,482	2.10	12,072.08	1.605	11,282.74
Laramie	23,437,704	4,147	5,652	34,793	2.35	55,078.61	3.013	65,972.61
Lincoln	14,334,018	4,321	3,317	36,253	2.56	36,695.09	3.644	27,452.56
Natrona	13,725,804	1,197	11,467	10,043	1.20	16,470.97	1.415	35,670.66
Niobrara	4,673,897	1,045	4,473	8,768	3.00	14,021.69	3.500	17,096.30
Park	6,664,058	1,477	4,512	12,392	2.50	16,660.15	3.654	25,901.91
Platte	8,898,194	1,581	5,628	13,265	3.00	26,694.57	3.290	33,148.58
Sheridan	19,170,942	4,101	4,675	34,407	1.84	35,274.53	2.723	62,710.55
Sweetwater	20,179,091	2,867	7,038	26,054	.97	19,573.72	1.856	20,422.62
Uinta	8,642,738	1,866	4,632	15,656	2.10	18,149.75	3.100	28,746.18
Washakie	3,480,125	523	6,654	4,388	2.50	8,700.31	2.760	8,868.23
Weston	5,477,168	1,328	4,124	11,142	3.00	16,431.50	2.000	16,302.89

[1] Reported to the State examiner for the year 1915. [2] Many districts have no special tax.

TABLE 16.—*Taxation statistics, Lincoln County, Wyo.; also, for comparative purposes, statistics regarding pupils and teachers.*

School district No.—	Valuation.	Special levy, in mills.	Received from special levy and polls.	Received from county.	Received from State.	Bond indebtedness.	Teachers actually employed.	Special levy necessary to raise $200 per teacher employed.	Census, 6–21.	Enrollment.	Average daily attendance.	Valuation per school child.	Amt. spent per school child.	Number of eighth-grade graduates (1915).	Number of teachers.	Amount spent per teacher.	Qualifications and certificates of teachers.	Salary, per month.	School months.
1	$3,267,482	3.50	$13,809	$8,951	$8,533	$36,000	30	1.8	1,017	934	644	$3,225	$30.77	24	30	$1,043.12	Professional training required; first-grade certificate at least.	[1] $75–$100 [2] 65– 90	9 10
2	1,994,981	1.51	4,484	3,516	3,515	0	11	1.1	419	413	283	4,761	27.48	14	11	1,046.90	All first grade except superintendent, first professional.	[2] 70– 80	9
3	574,560	.00	679	1,918	3,037	0	6	2.0	362	250	197	1,587	15.56	13	6	939.07	1 certificate; 2 professional; second grade; 1 primary.	70– 75	9
5	2,804,855	.00	760	2,328	2,299	4,000	7	.5	274	(3)	(3)	10,236	19.65	2	7	769.51	3 first grade; 4 second grade.	65– 80	9
6	1,241,520	.00	370	2,557	730	0	8	1.2	87	(3)	(3)	15,419	42.03	5	8	457.18	Second grade	50	7–8
7	180,674	.00	53	320	176	0	1	1.1	21	(3)	(3)	6,691	26.15	2	1	549.22	Third grade	50	8
8	900,678	3.00	2,940	1,598	915	10,000	5	1.9	109	(3)	(3)	8,263	50.02	1	5	1,090.61	3 second grade; 1 third grade; first professional.	50 [4] 95	9 6
9	520,162	.00	189	1,288	529	0	4	1.5	63	(3)	(3)	8,256	31.83	0	4	501.36	Second grade	55	6
10	220,205	.00	114	959	293	0	3	2.7	35	(3)	(3)	6,291	39.03	1	3	341.57	do	60	6–9
19	1,546,995	3.50	6,114	11,828	12,384	29,010	42	5.4	1,476	(3)	(3)	1,007	20.54	74	42	819.61	Nearly all second grade; high school at least first grade.	[2] 60– 65 [1] 90– 100	6–8
20	480,194	7.00	3,390	1,598	1,596	5,800	5	2.0	182	136	95	2,632	36.18	8	5	1,317.00	1 second grade; 1 first grade.	[2] 70– 80	6–9
21	356,899	3.50	1,593	959	998	0	5	2.5	119	(3)	(3)	2,974	29.83	4	3	1,183.50	2 second grade; 1 first grade.	60– 70	6
22	165,590	.00	185	639	628	0	2	3.6	75	(3)	(3)	2,207	19.38	0	2	726.27	Second grade	55– 65	9
23	79,124	3.50	470	639	688	0	2	7.5	82	63	37	964	21.92	0	2	898.86	do	50– 75	6

[1] High school. [2] Grade. [3] No information in the office of the county superintendent. [4] Principal.

NOTE.—The amount received from the special levy makes up 24.8 per cent of whole amount. The amount received from the county and poll makes up 42.4 per cent of whole amount. The amount received from the State makes up 32.8 per cent of whole amount. In order to raise $200 per teacher, levy would vary from 0.5 mill in district 5 to 7.5 mills in district 23, because of unequal distribution of property valuation among districts.

Four-year high school, 5 or more teachers, Kemmerer, district 1.
Four-year high school, 5 or more teachers, Afton, district 19.
Four-year high school, 1 teacher, Big Piney, district 8.
Two-year high school, 1 teacher, Cokeville, district 5.
One-year high school, 1 teacher, Jackson, district 20.
One-year high school, 1 teacher, Diamondville, district 2.

However, special-tax burdens are much further from being equitable. The table shows also that the average special district tax varies from 1.4 mills in Natrona (a county with a high per capita valuation as noticed above) to 4.3 mills in Hot Springs County. The facts are that some districts which have large valuation need a very small levy for reasonably good schools, and other districts with small valuations must levy a high rate in order to provide even meagerly for the children. The small levy or the lack of any levy at all may also be due to the fact that the community is too indifferent to the necessity of education to care properly for the expense of good school facilities. The following shows the percentage of districts which make no special levy for each of 18 counties of the State from which data were obtained

	Per cent.		Per cent.		Per cent.
Albany	60	Weston	25	Laramie	0
Lincoln	50	Sheridan	25	Fremont	0
Washakie	37½	Park	20	Campbell	0
Crook	36	Carbon	14⅔	Unita	0
Converse	33⅓	Big Horn	12½	Hot Springs	0
Johnson	31	Niobrara	9 1/11	Natrona	0

Table 16 is a detailed study of one county showing special district levies, the amount received from special levy and polls, the amount from county general tax, and the amount from the State. Fifty per cent of the districts in this county levy no special tax, but depend upon the State and county for the entire support of their schools (excepting the small amount from polls). Reference to Table 16 will verify in part the statement of one investigator that these schools usually have poorly qualified teachers, with low salaries, short terms, poor buildings and equipment. So indifferent are some of these districts that data on enrollment and attendance are not available in the office of the county superintendent. In contrast to these, district No. 20 levies a tax of 7 mills, employs five teachers, enrolls 75 per cent of its census children, pays $70 to $80 to its teachers, and has a six or nine months' term: This district pays 52 per cent of its total school expenditure by local tax and receives approximately 24 per cent from the county and the same from the State.

The following shows the percentages of total expenditure for schools coming from local, county, and State sources in Lincoln County:

TABLE 17.—*Per cent of taxes from various sources in Lincoln County.*

Districts.	Local.	County.	State.
No. 1..	44	29	27
2..	39	31	31
3..	12	34	54
5..	14	43	43
6..	10	70	20
7..	10	58	32
8..	54	29	17
9..	9	64	26
10..	8	70	21
19..	20	39	41
20..	51	24	24
21..	45	27	28
22..	13	44	43
23..	26	35	38

District 1, with a special levy of 3½ mills, pays 44 per cent of the total expenditure through special levy and receives approximately 28 per cent each from the county and State. Districts Nos. 19, 21, and 23, with the same special levy of 3½ mills, pay from local sources, respectively, 20 per cent, 45 per cent, and 26 per cent of the total expenditure. The county and the State each contribute approximately one-half of the remaining 80 per cent, 65 per cent, and 74 per cent, respectively. These districts, though paying the same tax levy, raise thereby very different amounts (see Table 16), spend different amounts of money per teacher, and have different tax-levying wealth per child. For example, district 21 has more than twice the wealth per child that district 23 has. The wealth per teacher employed varies as greatly in these districts as shown in Table 18.

TABLE 18.—*Valuation per teacher and child in Lincoln County.*

Districts.	Valuation per teacher.	Valuation per school child.	Amount received from State divided by the number of teachers employed.
No. 1....	$108,916	$3,225	$284
2....	181,693	4,761	319
3....	95,759	1,587	506
5....	400,693	10,236	328
6....	155,188	15,419	91
7....	180,674	6,691	176
8....	180,135	8,263	182
9....	150,040	8,256	132
10....	73,401	6,291	98
19....	36,833	1,007	296
20....	96,039	2,632	319
21....	118,966	2,974	333
22....	82,794	2,207	314
23....	39,562	964	344

The difference in valuation per school child for the different districts in the county is shown also in the table referred to. This in itself is not always a fair method of judging the ability of a district to maintain necessary schools. As previously stated, one teacher

is needed for a school of 5 as well as for one of 25 children, and he should be as well qualified and therefore receive as much salary. The wealth per teacher is a fairer basis of judgment than the wealth per child. The table shows that the two valuations do not always correspond. In the county studied the wealth per teacher varies from $36,833 in No. 19 to $400,693 in No. 5. This difference in valuation indicates how much more in proportion to wealth some communities must pay for education than others. The table shows also the amount received from the State divided by number of teachers employed. The county fund is now distributed on this basis.

It is fair also to consider what the different districts in the county contribute to the county funds and the relation of this contribution to the amount they receive in return from the county. Table 19 makes such a comparison.

TABLE 19.—*Amounts received from and paid to the county general fund by districts in one county.*[1]

Districts.	Received from county.	Paid to county.	Paid more or less than received.
No. 1...	$8,951.04	$8,364.75	$586.29 less.
2...	3,516.48	5,107.15	1,590.67 more.
3...	1,918.08	1,470.87	447.21 less.
5...	2,327.76	7,180.43	4,852.67 more.
6...	2,557.44	3,178.19	620.75 more.
7...	319.68	462.53	142.85 more.
8...	1,598.40	1,305.94	292.46 less.
9...	1,287.72	1,331.61	43.89 more.
10...	959.04	563.72	396.32 less.
19...	11,828.16	3,960.31	7,967.85 less.
20...	1,598.40	1,229.30	369.10 less.
21...	959.04	913.66	45.38 less.
22...	639.36	424.91	214.45 less.
23...	639.36	202.56	436.80 less.

[1] No allowance made for loss from uncollected taxes or for cost of collection.

It is not advocated that these should be equal, as the purpose of county aid is not to equalize total amounts, but to equalize tax burdens and educational opportunities. In a general way the county tax in this county is fairly distributed; that is, those districts which received from the county more than they paid are usually the districts with the heaviest burdens and high levies, while those contributing more than they received have small local levies or relatively small local expenditures. More specifically stated, of districts Nos. 2, 5, 6, 7, and 9, which pay more than they receive, No. 2 has a special levy of only 1½ mills and the others none. Of those which receive more than they pay, Nos. 1, 8, 19, 20, 21, and 23 have a special levy of 3 mills or more. If State aid and local tax were equalized as well as county tax, in this county at least, school taxation would be reasonably fair to all districts. That the State fund does not tend to equalize the expense of teaching is shown in Table 17. As will

be seen from that table, the amount per teacher varies in this county from $91¼ in district 6 to $506 in district 3; that is, the State helps one district to the extent of contributing $91 a year to the salary of each teacher employed, and helps the other district to the extent of contributing $506 each year for each teacher employed.

In addition to the discrepancy already mentioned, the amount spent in the education of each child varies from $15 in district 3 to $50 in district 8 (see Table 16). Unless the money is very well managed in one case and very badly managed in another, the children in district 8 will receive three times as much in educational value as those in district 3. The amount spent per teacher (see Table 16) varies from $341.50 in district 10 to $1,317 in district 20. Is the teaching in district 20 worth four times as much as that in district 10? What of the children in the 50 per cent of the districts from which enrollment and attendance statistics were not obtainable from the county superintendent, and the investigator says "probably not from the districts themselves"? Of the total school expenditure of the county studied, 24.8 per cent comes from special district tax, 42.4 from the county, and 32.8 from the State.

The figures given show that the district unit for taxation and administration tends to make very unequal burdens of taxation and very unequal educational opportunities for children. This is not true in Wyoming alone; it has been found almost universally true in States organized on this basis. Not only is this not an equitable basis among rural districts themselves, but it usually causes a wide discrepancy in the kind and amount of education furnished to rural and city children. An investigation recently made of school taxation in Colorado shows that rural districts pay about half as much in local taxation as city districts. For every dollar of special taxes spent on a child in the city 54 cents is spent on a child in the country—this in spite of the fact that the wealth per capita is greater in rural districts throughout the State than in city districts. Indications from data obtainable are that Wyoming conditions are similar.

Table 20 shows special levy, school census, and other data for 16 districts in the State which maintain high schools. The special tax rate in these districts varies from 2.7 to 10.5 mills, averaging about 5 mills. This should be contrasted with the levies in the county studied (Table 16), in which the highest rate is 7 mills and in which 50 per cent of the districts have no special levy whatever. Generally speaking, cities pay higher school tax, better salaries, have better buildings and equipment, and spend more per child on education than rural districts. Rural districts in the State are not doing their share in levying special taxes. The 16 districts referred to above enroll 32 per cent of all the children in school in the State, and they raise 41 per cent of all money raised in the State by special tax levies.

This is not because country districts are less able to afford taxation than city districts. Although detailed data for the whole State are not available, Table 21 shows valuation, school census, and per capita wealth for the three largest cities in the State and corresponding figures for the other districts in the counties in which they are located, after deducting census and valuation of cities from the county totals. Not only is the wealth per school child greater in each case in the county than in the city, but the combined valuation is such that rural districts could afford to provide not only elementary education, but high-school education as well, without increasing the tax rate above the average city rate (this estimate is made on a basis of a 5-mill levy, and presupposes some assistance from the State and county on the per capita teacher basis). While the conditions shown in this table may not hold in exactly the same way throughout the State, it illustrates the fact that a change in present methods of taxation is necessary if an equitable adjustment is to be accomplished and adequate educational facilities, including high schools, are to be furnished to children in the rural districts.

TABLE 20.—*School census, valuation, and special taxes in school districts in which cities with high schools are located.*[1]

Cities.	Counties.	School census.	Tax property valuation.	Amount raised by special tax, per child.	Special district tax, in mills.
Cheyenne	Laramie	2,718	$10,260,138	$10.31	2.73
Sheridan	Sheridan	2,272	7,732,150	17.01	5.00
Laramie	Albany	1,371	5,477,339	21,79	5.45
Kemmerer	Lincoln	1,013	3,267,481	11.28	3.50
Newcastle	Weston	1,013	4,313,674	14.80	3.50
Evanston	Uinta	890	3,505,217	13.78	3.50
Rawlins	Carbon	532	3,924,991	25.08	3.40
Powell	Park	498	871,638	19.64	10.50
Lander	Fremont	453	1,526,436	13.60	4.10
Lovell	Big Horn	444	479,886	9.19	8.50
Cody	Park	345	1,482,527	25.79	6.00
Lusk	Niobrara	318	1,201,894	15.09	4.00
Cowley	Big Horn	316	401,687	7.62	6.00
Basin	do	273	1,305,581	14.85	3.10
Gillette	Campbell	252	1,319,957	34.08	6.50
Thermopolis	Hot Springs	241	1,147,095	24.29	5.10

[1] Incomplete information prevented the giving of all. The average amount raised by special tax in the cities of the State is $17.35 per child. The average special tax rate is 4.95 mills.

TABLE 21.—*Valuation and census for the given cities.*

	Valuation.	School census.	Per capita wealth.[1]
Laramie County (Cheyenne city excluded)	$13,177,566	1,429	$9,221
Cheyenne (city of)	10,260,138	2,718	3,513
Albany County (Laramie city excluded)	9,205,924	678	13,578
Laramie (city of)	5,477,339	1,371	3,994
Sheridan County (Sheridan city excluded)	11,438,792	1,829	6,254
Sheridan (city of)	7,732,150	2,272	3,403
State as a whole (16 cities excluded)	163,292,519	26,635	6,137
Sixteen cities maintaining high schools	48,217,691	12,949	3,723

[1] On the basis of school population.

It is true that while an apportionment on per capita basis works a hardship on the rural districts, apportionment on a per teacher basis is a hardship on the cities. It is for this reason that a consideration of number of teachers, plus aggregate daily attendance, is usually fairer to all concerned. However, the country usually contributes to the taxable wealth of cities in such a way that the cities can afford to make some recompense. For example, most of the cities in Wyoming would not be favored with railroad terminals and shops, sugar-beet factories, and other taxable corporation property were it not for the industry of the people in the surrounding rural districts. Therefore, the country districts may justly partake of some of the benefits coming from a tax on these corporation properties. Moreover, under the existing system, the injustice done cities through the county method of distribution is largely compensated by the State method of distribution. Let us take, for example, the actual situation in the three largest cities of the State, Cheyenne, Sheridan, and Laramie. According to the report of the board of trustees of the city of Cheyenne, the city received from the county general tax $18,000 and paid into the county fund $31,000, an excess of about $13,000 in favor of the rural districts. Cheyenne received from the State $22,800, the remainder of the county $12,000, an excess over the rural districts of about $10,800 in favor of the city. While these funds do not exactly balance in amount, it should be remembered that the city of Cheyenne, employing 40 teachers for its elementary schools, receives from the State an amount equal to approximately $570 [1] for each elementary teacher employed, in addition to $300 from the county fund, while the rural schools in Laramie County, employing 104 teachers in elementary schools, receive only $115 from the State for each teacher, in addition to $300 from the county. Since the true expense of maintaining schools is based on the number of teachers necessary rather than on the number of children attending, the cities really receive from the State and county combined more aid in proportion to their needs than rural districts.[1]

The city of Laramie receives from the State $11,500, an amount equal to approximately $575 for each of 20 teachers employed in the elementary schools and the junior high school, in addition to $300 per teacher from the county fund. The rural schools receive from the State only $5,695 for 52 teachers in elementary schools, or about $109 per teacher, in addition to $300 from the county. The city of Laramie pays into the county fund about $11,000 and receives therefrom about $9,000. Here again this excess of $2,000

[1] If high-school teachers, special supervisors, and the city superintendent are included, the amount received would be $428 for each. High schools are omitted in the calculation because the country districts have no high schools.

paid to the county is more than balanced by the excess received from the State ($5,808).

The city of Sheridan receives from the county fund $13,500 and pays into the same fund $6,495. The country districts therefore, through county tax as well as the State through apportionment, are helping the district of Sheridan to maintain its schools. (These figures are only approximately correct, because actual statistics were not available. Those given are obtained by multiplying valuation by tax levy in mills in the one case and multiplying census by $8.39—the State per capita apportionment—in the other. They do not allow for uncollected taxes and the expense of collection. They are, however, nearly correct, the proportions are right, and the conclusions are practically true.)

One important consideration in the whole question of the support of education is the method of bookkeeping in the various school units. Each board at present elects one of its members treasurer. He keeps the board's accounts in his own way, although a special clerk's and treasurer's record book is recommended by the State superintendent. Each board may audit its treasurer's accounts if it sees fit to do so, or the district may vote an audit. No other agency has power, however, to examine the records of the treasurer. As a matter of fact, very few accounts are ever audited and information concerning them is difficult to obtain. It was obtained for this report in relatively few cases. Instances similar to the following are reported as common by the county superintendents. One district in reporting to the county superintendent shows a balance on hand at the beginning of the fiscal year, May 1, 1915, of more than $500 less than the balance on hand at the close of the preceding year as given in the preceding annual report. On one report from a large district the balance on hand at the close of the year was approximately $5,000 less than the difference between the expenditures and the receipts for the year including balance brought over from preceding year.

An inquiry was sent to the clerks of 359 boards asking for definite information of their accounting systems and of the general conduct of the business side of their work. The answers received were in nearly all cases vague, indicating very clearly the decided need of more businesslike methods of handling school funds and accurate methods of bookkeeping. It is recommended in another section that all school funds be left in the county treasury, credited to the various districts, and paid out by the treasurer on warrants signed by two members of any board. The county treasurer thus acts as a banker for the funds, and his accounts with the individual districts necessarily show the expenditures of the districts and the purposes for which made.

IV. MOVEMENTS IN OTHER STATES AS OUTLINED IN RECOMMENDATIONS FOR WYOMING.[1]

State administration.—In Wyoming, as in older States, there is a growing feeling that the State must assume more and better supervision over the public schools, so that the State school funds shall be expended in the best possible way. This does not mean that the State should attempt to administer the entire school system in all of its details from a central office. There is always a tendency toward a mechanical system in school affairs when a central office has a large amount of detail administrative work to handle. County management and a certain amount of local district management are desirable for this and other reasons of even more importance. However, there should be enough control from the State to assure that each local unit provides satisfactory education for its children and expends the State funds wisely.

As the population of a State increases, with the resulting growth in the school system, and as the work of education becomes more and more complex, the need of well-organized State leadership becomes greater. A State should establish a general educational policy and provide means for carrying it out consistently. To do this the leadership must be continuous. Older States than Wyoming have provided continuous leadership by creating a nonpolitical, continuing State board of education and a State department of education under the immediate management of a professionally qualified State superintendent of education selected by the board. In 37 of the 48 States of the Union there are such boards with functions relative to the public schools. In 15 of the States the State superintendents of public instruction are appointed officers, not affiliated with politics nor with political parties.

The composition of the State boards of education varies greatly in different States. In eight States the boards are made up ex officio of State officers, usually including the governor, the superintendent of public instruction, and one or more other State officers. Such boards have shown themselves to be of relatively little value. In 10 other States the boards are composed of ex officio members and members appointed at discretion by the governor. In several States the boards are made up ex officio of persons engaged in education. Neither plan gives a wholly satisfactory board. The drift is toward

[1] This section was prepared and included at the request of members of the State School Code Committee.—A. C. M.

the board appointed by the governor and composed of broad-minded men and women of affairs who may or may not be engaged in educational work, but who are particularly adapted to the position in personality and experience. The recent change to State boards of this type in Vermont and California is an indication of the trend.

Appointment of the board by the governor has a twofold merit:

(1) It recognizes the executive head of the State as responsible to the people for the efficiency of every department of public service; it tends to make the board responsible to the public.

(2) It centers responsibility where it can be definitely located, as can not be done where the board is elected by the legislature or by the people.

The size of the board, the term of office, and mode of retiring are all important factors. The board should be large enough so that a death or resignation occurring at the time of the expiration of the term of any of its members would not change the majority of the board; and the term of office should be long enough, with not over one-fifth expiring any year, so that the board may be continuous. A board of seven or eight members, holding office from six to nine years, with one term expiring each year or two terms each biennium, fulfills these conditions. Such a board would guarantee that degree of continuity in service without which no business can be successfully administered, and it could not be changed to satisfy the caprice of any individual or to meet the political needs of any State administration. A larger board means additional expense to the State, additional difficulty in determining policies, and difficulty in securing a quorum to do ordinary routine business. The best boards are those whose members serve without pay except for necessary expenses incurred in conducting the business of the board.

The preference in the various States seems to be for a State board with duties and powers which make it responsible for the efficiency of the whole State elementary and secondary systems. The duties and powers actually given vary all the way from almost no control to almost complete control of the public schools. The consensus of opinion in the United States seems to be that the board should have definite functions concerning the regular public schools of elementary and secondary grade, advisory control of all special schools of elementary or secondary grade, such as schools for the education of delinquents or of the blind and deaf, and of special State vocational schools; also control of the preparation and certification of teachers for the public schools. Otherwise its policies in regard to school management can be carried out only with difficulty.

Between the State board of education and the State superintendent there need be no clash. The functions of the board, apart from appointing the superintendent, and therefore approving or

disapproving his acts, should be largely legislative and advisory. When it has determined upon a general policy or a particular action to be put into immediate operation, the execution should be left to the superintendent as executive officer. Such assistants as may be necessary to enable the superintendent to carry out his work should be selected by him, final appointment resting in the board. The board in reality passes upon his use of the selective power to obtain the right kind of persons rather than upon the persons themselves. This power of the board prevents a new superintendent from appointing a new set of assistants if those already employed are doing satisfactory work.

The State department of education, to be effective, must command the respect of local school officers and teachers and it must have legal authority to require that legislation relative to education be observed. To secure these conditions there must be a chief State school officer of high standing in educational work retained in office as long as satisfactory services are rendered; an officer who, with his assistants, by visiting all parts of the State and coming into contact with school authorities and schools, will know at first-hand the use made of State funds and the kind of educational opportunities offered.

The size of the State departments in the various States measured in terms of the number of employees varies from 2 in Delaware—a commissioner of education and a stenographer—to nearly 400 in New York—a commissioner, 3 assistant commissioners, 20 chiefs of division, 17 field inspectors, and over 300 clerks, all housed in a special State education building.

Wyoming stands next to Delaware in the size of its department, with a State superintendent, one deputy, and three clerks, at least one-half of the time of the office force being required for the work of the State board of charities and reforms and the land board. The size of the departments in a few other States with systems not highly centralized is given below:

Alabama employs a superintendent, a deputy superintendent, a chief examiner for certification of teachers, four field agents, and seven clerks.

California employs a superintendent, a deputy, a statistician, a commissioner of secondary schools, a commissioner of elementary schools, a commissioner of industrial schools, and eight clerks.

Indiana employs a superintendent, an assistant superintendent, a deputy superintendent, four field agents, head of a manuscript department, and five clerks.

Massachusetts employs a commissioner of education, 2 deputy commissioners, 8 field agents, and 12 clerks.

Minnesota employs a superintendent, two assistant superintendents, a director of the teachers' employment bureau, six field agents,

and several office clerks. The six field agents are an inspector of high schools, an inspector of graded schools, a supervisor of teacher-training schools, a commissioner of rural schools, a commissioner of school buildings, and a commissioner of school libraries.

The cost of maintaining the Wyoming State department is also less than any other except Delaware. The State superintendent is paid $3,000 a year, which is the same salary as paid to 16 other State superintendents. In 23 States larger salaries are paid, 2 paying $10,000 a year. The salaries in 8 are less than those in Wyoming. None, however, pays its deputy superintendent so little.

Nonpolitical officers.—To give the office the standing that it should have, so that it may be regarded as the leading authority on school affairs in the State, it must be made nonpolitical, with its head no longer identified with party politics. So long as the people look upon it as a political office, they will not turn to it for advice in educational matters. In 15 States the chief school officer is now appointed; undoubtedly in many others a change would have been made before this time if a constitutional amendment were not required to make the change. In the States where the State superintendents are appointed, they may be selected from the country at large, in most instances paid whatever salary is necessary to get the best person obtainable, and retained in service as long as the work is effective. Of the 23 States paying greater salaries than Wyoming, the State superintendents are appointed in 12.

In several of the States with appointive State superintendents the selection and appointment is made by the governor. There are several objections to this method, and two States—Tennessee and Maryland—have since 1914 abandoned it and vested the appointment in the State board. If the State board is to be made responsible for the State's educational business, it would seem that it ought to have the selection of its own executive officer, particularly as when the appointment is by the governor there is a tendency to make the office a political one and to subject it to the fluctuations of party and factional politics.

The length of service of the State superintendent in Wyoming and in a few States where appointive officers are found is given below. Wyoming has not, of course, had as many changes as many other States where the State superintendent is elected for a two-year term instead of a four-year term. Since 1890, when Wyoming became a State, there have been nine superintendents, including the present officer, who began service in 1915. Six of these served one term of four years each, one served two terms or eight years, two served two years each. Of the following six States in which the State superintendents are appointed, terms have been as follows:

Pennsylvania has had one superintendent continuously since 1893.

Vermont had three superintendents from 1892 to July 1, 1916; the third served 16 years.

Maryland has had its present superintendent since 1900.

Massachusetts had four superintendents or commissioners between 1890 and 1916, the first serving 4 years, the second 10, the third 5, and the fourth 7 years.

New Jersey has had three since 1892; the first served 4 years, the second 15 years, the third since his appointment in 1911.

What has been said in regard to making the office of the State superintendent appointive applies equally as well to the office of county superintendent. This is quite generally appreciated, and considerable activity is evident in all parts of the United States to bring this condition about. In 23 States the rural superintendents are now appointed, in the other 25 they are still elected.

The rural superintendents of New England are township or union district officers and are appointed, except in Vermont, by the "town school committees" for whom they work. In Vermont they are selected and appointed by the State board of education. In New York the rural superintendents are appointed by a board composed of two persons elected from each township in the supervisory district; in Virginia, by the State board of education. Rural supervision in Nevada is under five deputy State superintendents appointed by the State board of education. The county superintendents of Delaware are appointed by the governor; those of New Jersey by the State commissioner of education; those of Alabama, Indiana, Louisiana, North Carolina, Ohio, Utah, and part of those in Georgia by the county boards of education; those of Tennessee by the county court; and those of Pennsylvania, Iowa, and Indiana by a county meeting of school officers representing the townships in the county. The consensus of opinion seems to be very strongly in favor of the appointment by a county board of education representing the people of the county. The superintendent should be selected from within or without the county for special fitness and retained as long as the services rendered are satisfactory. A study of the rural superintendents and the length of the terms of service and their education, training, and experience, recently made in the Bureau of Education, shows that the term of service in the States in which they are appointed is much longer than in the States in which they are elected, and that men and women with more general education and teaching experience are selected than when the superintendents are elected by popular vote. For instance, among the appointed county superintendents, 36 per cent are serving their first term, 29 per cent their second term, and 35 per cent their third or more than the third term. Among the elected superintendents 52 per cent are serving their first term, 28 per cent their second term, and 19 per cent their third term. This

omits the rural superintendents of New England, many of whom have served many years, the district superintendents of New York, and also the county superintendents of Ohio, who on account of the change in the State school code are all serving their first term. As to education, approximately 83 per cent of the superintendents in New England have had four years of college education, requiring four years of high school for entrance, and an additional 12 per cent have had at least two years of college work. All have had at least a complete high-school course, only 3 per cent having no college work. In New York State 32 per cent have had complete college education and an additional 50 per cent have had from one to three years of college. Among the county superintendents appointed in various ways 1.7 per cent have had elementary education only, while among those elected by the people for four-year terms 9.1 per cent have had elementary education only, and those elected for two-year terms 6.6 per cent. Among the appointed superintendents 44 per cent have had full standard college education and 32 per cent from one to three years of college work; among those elected for four years 12 per cent are college graduates and 38 per cent have had from one to three years; among those elected for two-year terms 17 per cent are college graduates and 33 per cent have had from one to three years of college work.

Supervision.—Throughout the United States there is a growing feeling that the county superintendent of schools should be a man or woman of training and experience and should be assisted by a competent corps of supervisors. Many States are now making provision for these supervisors.

In the New England States the supervisory district is always small, being composed of from one to five townships, employing as a rule 40 to 50 teachers. In New York the average supervisory district is one-fourth of the county, or approximately 200 square miles of territory. In several States, such as Pennsylvania, Wisconsin, and others, counties with more than a fixed number of teachers are required to employ assistant superintendents. In Ohio, West Virginia, and Oregon counties are divided into supervisory districts, and special supervisors as assistants to the county superintendents are employed in each district. This is a mandatory law in Ohio, the 88 county superintendents being assisted by approximately 500 district superintendents. In West Virginia it is a permissive law, but has proved so successful that practically one-half of the teachers in the State are teaching in districts supervised by district superintendents under the general oversight of the county superintendent. The supervisory system of Oregon is, all things being considered, probably better suited for Wyoming than the others mentioned.

Oregon in 1911 passed an act providing for compulsory supervision. It required the county superintendent in every county with 60 or more school districts to appoint a county board of education, to be composed of four persons and the county superintendent. The majority of rural districts in Oregon contain but one school. This board was required to divide the county into supervisory districts, each to contain from 20 to 50 school districts (practically 20 to 50 teachers), and to appoint a district supervisor for each district so created. The district supervisors are required to devote their entire time to supervision for at least 10 months in each year. They are county officers, responsible to the counties through the county superintendents, and are paid by the county. The county superintendent of schools may be supervisor of one of these districts. If a similar plan be adopted in Wyoming, there seems to be no reason why the county superintendent could not receive special pay for his services as supervisor of one of the supervisory districts until such time as a constitutional amendment can be adopted making possible more adequate salaries than are now fixed by the constitution. Wyoming would require approximately 40 supervisors; the minimum salary should be $1,000, half of which should be paid by the State. The State would then be in a position to see that proper persons are appointed and to control their work sufficiently to assure satisfactory service. The district superintendents of Maine, Massachusetts, Vermont, Connecticut, and New York receive part or all of their salaries from the State; the county superintendents of New Jersey are paid by the State; those of Tennessee and Ohio receive part of their salary from the State; the assistant superintendents of Pennsylvania are paid from State funds. This indicates the trend.

In West Virginia many of the district superintendents who happen to be qualified for the work have been made organizers of boys' and girls' agricultural and canning clubs, devoting part of their time to the work, particularly during the summer months, and are paid for this by the State agricultural college. The result has been very satisfactory, in that it has made the club work a definite part of the regular school work, so that full advantage may be taken of it in the work of the school.

Organization for local administration.—Three distinct rural school units of organization are found in the United States—the district, the township, and the county. In addition, there are several instances of mixed systems, in which the responsibility for management is divided between the district and the township, the district and the county, or the township and the county. There is also some variety in the details of the township systems and much variety in those of the county systems.

The district system was adopted in practically all States in the early days of settlement and was probably the only system possible when the population was grouped in a comparatively few settlements scattered over a large section of country. With the increase of population it is passing away, being replaced by the township or the county system. Indiana, in 1852, was probably the first State to give it up.

Long before the abolishing of the district system in States which have adopted the township or county system, and in States which still have the district system, its weaknesses became apparent to those seeing the product of the system from the standpoint of the State, and State laws have been passed taking away from the local districts many of the powers and privileges formerly left with them. The requirement that none but State certified teachers be employed, that approved textbooks be purchased, that a State course of study be used, that certain sanitary measures be taken, are a few instances of this.

The township system prevails in New England and in New Jersey, Pennsylvania, Indiana, and parts of Michigan, North Dakota, and Iowa. It is particularly satisfactory in the States where the township is the principal unit for civil government, and not so satisfactory in others. For Wyoming and practically all of the West it would not be satisfactory for school administration.

Either the county or semicounty system, where the responsibility for the management is divided between the county or township and district, is found in 18 States. Maryland adopted the county system in 1865, the other States since that time. In the straight county system, such as Utah, Tennessee, etc., the schools of the county, except those in independent cities, are under the management of a single board and are supported by State and county funds expended by the board for schools in different parts of the county according to their needs. In other words, the schools of the county are handled by a single board in exactly the same way as are the schools of any large city system. The superintendent is appointed by the board and is its executive officer. As a rule, local trustees are appointed by the board or elected by the patrons of each school to act as custodians of the building and to represent the people before the county board. Under the system, the location of the schools is determined by the county board; usually, however, the territory in the county is divided by the board into school districts as a matter of convenience, so that children may know which school to attend, and in some cases the local districts are allowed to levy and collect a local tax to be used in supplementing the county funds in maintaining a better school than would be possible otherwise.

Wyoming, however, is probably not yet ready to adopt a county system, on account of the size of the present counties and the sparse population. A semicounty system would probably be more effective. It would seem advisable to provide in each county by election a continuing county board of education and give to this board the management of those functions of education which can be best managed by the larger unit, leaving to the local communities all other functions. In this, Wyoming would be following the example of other States, not only those definitely known as county-unit States, but many others, for there are county educational boards of various kinds in 30 States. These include boards for supervisory purposes, for the examination of teachers, for the selection of textbooks, for the control of special schools, high schools, etc.

Support of schools.—The best way to raise and distribute funds for the support of public education is by no means definitely decided, and space can not be taken here for an extended discussion of the subject. In no two States is there uniformity. All States contribute some State funds to public elementary and secondary education, the amount varying from less than 1 per cent of the total cost of the schools in Massachusetts to 55 per cent of the total expenditure for all school purposes in Alabama. The Massachusetts State funds are used only for special purposes, such as the payment of the salaries of rural superintendents, the support of vocational schools, and for assistance to the poorer towns, which have less than a fixed valuation and are raising by local tax a specified amount. In Alabama all but a small amount of the State funds are distributed to the counties in proportion to the school population and are expended in the counties by the county boards in such a way as to assure as nearly as possible equal educational opportunities in all parts of the county. One-third of the counties depend entirely for the support of the schools on the money received from the State, the other third raise money by county taxation to supplement the State fund. Between these two extremes are all sorts of variations.

For the local support various States rely upon the county, township, or district as the unit of taxation—in many cases on two distinct units. In 24 States the local tax is from the county and local district; in 10 States from the township; in the others from the district only. The amount being raised on the county basis is constantly increasing; for instance, the New Mexico Legislature in 1915 placed practically the entire burden of support on the county rather than the local district.

The present practice in the distribution of the principal part of the State funds to the counties or townships or local communities is as follows:

32 on the basis of school population.
1 on the basis of valuation of taxable property.
5 on the basis of attendance of pupils.
3 on the basis of number of teachers.
2 on the basis of attendance and number of teachers.
1 on the basis of inverse ratio of property valuation.
2 on the basis of number of teachers and school population.
1 on the basis of number of schools and school population.
1 on the basis of attendance and property valuation.

County funds are distributed to local districts in many different ways similar to those stated above. In the States with the straight county system the county funds are expended by the county boards of education according to the needs of the individual schools, so that there will be furnished as nearly as possible equal educational opportunities in all parts of the county. Township funds are in practically all cases expended in the same way.

Special purposes for which State aid is given, either in specified amounts for the fulfillment of definite requirements set by legislation or in varying amounts for special needs at the discretion of the State board of education, are of considerable number, among them being the following:

(1) Maintenance of school to increase the length of term or the teacher's salary.
(2) Teachers' salaries when qualified teachers are employed.
(3) Minimum salary in poor district.
(4) School libraries.
(5) Erecting schoolhouses.
(6) Free textbooks.
(7) Salaries of county and other rural superintendents.
(8) Vocational education.
(9) Aiding schools for deaf, blind, and crippled children.
(10) Evening schools.
(11) Medical inspection.
(12) General improvement of rural schools.
(13) Consolidated rural schools.
(14) Transportation of children.
(15) Teachers' institutes.

Several plans of distributing State funds will illustrate the problem. The State school fund of Tennessee is 33⅓ per cent of the gross receipts of the State for all purposes. This education fund is divided as follows:

Sixty-one per cent is apportioned to the counties on the basis of school population 6 to 21 years of age.

Ten per cent is set aside, apportioned by the State board to counties which levy for public school purposes a tax of not less than 40 cents on each $100 of taxable property and a poll tax of $2 per poll to pay

half the salary of the county superintendents up to a certain minimum,[1] one-half the salary of supervisors employed as assistants to county superintendents, and to assist the establishment of consolidated schools and transportation of pupils. Any surplus is distributed in the discretion of the State board among the counties according to their educational needs.

Six per cent constitutes a high-school fund distributed to the public county high schools in proportion to the amount of money received by each from local sources.

One per cent is used to encourage the maintenance of libraries in public schools under general rules and regulations of the State board.

Thirteen per cent is used for the support of the four State normal schools.

Seven per cent for the support of the State university.

Two per cent for the support of the Tennessee Polytechnic Institute.

California pays from the State funds to each county and city $250 for each teacher on the basis of 1 teacher to every 35 children in average daily attendance. The remainder of the fund is distributed according to the average daily attendance. This money and the county funds are then distributed to each district in an amount equal to $550 for each teacher employed.

Missouri apportions $50 of the State fund to the districts for each teacher employed, the rest on the basis of the actual number of days' attendance of all pupils, that is, the aggregate attendance.

These illustrations are sufficient to show how State funds are distributed in other States to help equalize the burden of education. If the Wyoming State funds were distributed on the basis suggested in the recommendations (see p. 101), each district would receive $100 for each teacher employed and $166,066 would be distributed in proportion to the aggregate daily attendance.

Resources and school support in the various States.

States.	Total value of taxable property, in millions of dollars (1912).	Value of property for each child 5–18 years old (1913).	Number of adults for each 100 children 5–18 years old (1910).	Number of men 21 years and over for each 100 children 5–18 years old (1910).
United States	175,425	$7,337	.....	107
North Atlantic Division:				
Maine	1,030	5,900	241	120
New Hampshire	613	6,300	252	123
Vermont	797	9,500	237	119
Massachusetts	5,753	7,300	246	116
Rhode Island	833	6,600	231	111
Connecticut	2,154	7,900	231	115
New York	21,913	9,900	239	117
New Jersey	5,362	8,100	222	110
Pennsylvania	14,137	6,900	208	105

[1] All counties may participate in this one item.

Resources and school support in the various States—Continued.

States.	Total value of taxable property, in millions of dollars (1912).	Value of property for each child 5–18 years old (1913).	Number of adults for each 100 children 5–18 years old (1910).	Number of men 21 years and over for each 100 children 5–18 years old (1910).
North Central Division:				
Ohio	8,552	$7,300	227	113
Indiana	4,951	7,200	211	106
Illinois	14,596	10,000	213	108
Michigan	5,169	7,100	214	109
Wisconsin	4,282	6,400	183	93
Minnesota	5,267	8,900	185	99
Iowa	7,437	12,700	195	98
Missouri	5,546	6,300	195	98
North Dakota	2,038	10,900	166	93
South Dakota	1,331	7,500	175	96
Nebraska	3,605	10,700	182	95
Kansas	4,394	9,400	190	98
South Atlantic Division:				
Delaware	294	5,700	215	107
Maryland	2,002	5,700	196	94
Virginia	2,175	3,400	153	74
West Virginia	2,180	5,800	161	84
North Carolina	1,745	2,200	133	63
South Carolina	1,301	2,500	124	58
Georgia	2,299	2,600	137	66
Florida	1,015	4,300	165	87
District of Columbia	767	16,369	.....	144
South Central Division:				
Kentucky	2,152	3,100	160	79
Tennessee	1,834	2,700	152	74
Alabama	2,050	2,900	138	67
Mississippi	1,306	2,100	160	65
Louisiana	2,057	3,800	144	70
Texas	6,552	5,000	142	72
Arkansas	1,758	3,400	139	70
Oklahoma	4,321	7,300	145	78
Western Division:				
Montana	1,113	12,300	261	165
Wyoming	345	10,200	269	179
Colorado	2,286	11,100	231	125
New Mexico	502	4,700	162	88
Arizona	487	8,600	213	129
Utah	735	6,300	160	85
Nevada	441	28,400	269	180
Idaho	591	5,900	190	113
Washington	3,055	10,400	255	151
Oregon	1,843	11,100	253	148
California	8,023	15,500	301	169

Teaching corps.—The amount of general education and professional training required for teaching is being raised rapidly throughout the country as more and more trained persons become available. Very few cities in the United States employ teachers who have not had the equivalent of a standard high-school course and two years of normal-school work. Those with less training have found employment in country schools. In order to force the employment of better qualified teachers in rural districts, State laws have been passed in several States prohibiting the employment of persons with less than a specified amount of general and professional education after certain dates. Ohio, for instance, in 1913, enacted the following law:

Unless said applicant is a graduate of a college or university of approved educational standing, shall possess an amount of professional training consisting of classroom

instruction in a recognized institution for the training of teachers, not less than the following: After January 1, 1916, such applicant shall possess not less than 6 weeks of such instruction; after January 1, 1917, not less than 12 weeks of such instruction; after January 1, 1918, not less than 18 weeks of such instruction; after January 1, 1919, not less than 24 weeks of such instruction; after January 1, 1920, not less than 30 weeks of such instruction; after January 1, 1921, not less than one year of such classroom instruction in a recognized school for the training of teachers.

The result was an exceedingly large attendance in the six-week summer schools in the summer of 1913 and succeeding summers. It may be noted that the law is such that teachers already in service may meet the requirements by attending summer schools annually if at the time of the enactment of the law they possessed less than the required amount of professional training. Several other States have passed similar laws with practically the same result. Wyoming should pass such a law; it would make it necessary to establish several summer schools in various parts of the State. These schools should be under the management of the State board of education, and for their support money now used for county institutes might be used, attendance at summer school being substituted for the institutes.

States having continuing boards of education with permanent administrative officers find that certification is far more satisfactory when controlled by the board than when subject to the changes and revisions which legislative control makes necessary. These States award certificates on a basis of education and professional training more often than on success in examination. In connection with the certification departments, employment bureaus are maintained at relatively slight expense. A State employment bureau is a saving to teachers, who now pay a percentage of their annual salary to a private bureau, and it enables school authorities to get impartial accounts of a teacher's efficiency. This plan is in successful operation in several States, notably Massachusetts and Minnesota.

V. RECOMMENDATIONS.[1]

As a result of the study of the school system of Wyoming the following recommendations are offered:

I. Provision for a State Board of Education as the responsible head of the educational system, the executive officer of the board to be the State superintendent of public instruction.

The board should be composed of men and women of affairs, scholarship, business ability, and broadmindedness, but not necessarily engaged in education; they should be appointed from various parts of the State by the governor with the approval of the senate, or elected by the people at large. A satisfactory number of members is seven, the term of office eight years, not more than two terms expiring each biennium. In this way a continuity of service and freedom from political interference may be secured. The members should serve without pay (or receive a small per diem), but should be paid their actual traveling and other expenses in attending board meetings. Four fixed meetings should be held each year and provision made for special meetings on the call of the governor, the State superintendent, or a majority of the members.

The powers and duties of the State board of education should be clearly defined by law and should include the following:

1. To advise the State superintendent of public instruction in the duties conferred upon him by constitution or law.

2. To have general charge of the educational interests of the State,[2] determining educational policies, particularly in organization and administration and concerning the general scope of the public-school system.

3. To appoint a State superintendent of public instruction (as soon as a constitutional amendment permitting can be obtained), and upon the recommendation of the State superintendent to appoint all assistants and employees of the State department of education; to fix the salaries and terms of office of the State superintendent and all assistants; to approve the appointment of all district supervisors in the counties as recommended below, who may be paid in whole or in part from State funds.

---

[1] The Wyoming school code committee met in Cheyenne on July 8, 9, and 10, 1916, and adopted the report of the bureau as its report and the recommendations of the bureau as its recommendations, with certain exceptions, all of which are noted above and in the following pages as footnotes.—A. C. M.

[2] Without reference to the State University, which is not included in this survey.

4. To advise the regents of the university relative to the content and administration of the course of study in the State normal school at the State university, and to have complete administrative control of all other State teacher-training schools that may be established by the State.

5. To have general oversight of vocational or other special schools or departments of schools receiving State aid or Federal or other financial aid given through the State, whether established by the State or established by local authorities and under immediate local control.

6. To control and manage State institutions for the care and education of orphans, the deaf or blind, feeble-minded, or other special classes that may be established, and to exercise general oversight of any similar institutions established by local communities and under immediate local control if they receive State aid.

7. To apportion the State school funds to the counties and to enforce State laws and regulations by withholding from any county the pro rata share of any school district maintaining a school violating such regulations.

8. To approve the charters of all higher education institutions that may be established in the State and to determine standards on which degrees may be conferred, always under the provision of statute law.

9. To exercise the functions, powers, and duties now conferred upon the State board of examiners; transferring the work to the State department of education and providing assistants, upon the recommendation of the State superintendent, to correct and grade examination papers and to recommend certification.

10. To maintain a State teachers' employment bureau in connection with the certification division of the State department of education to assist local authorities in securing teachers.

11. To approve the courses of study prepared for the schools of the State by the State superintendent, and the lists of textbooks that may be used as basic texts in public schools.

II. Reorganization of the State Department of Public Instruction.

The department should be strengthened (1) by having the functions, powers, and duties of the State superintendent of public instruction clearly defined by legislative enactment; (2) by relieving the State superintendent from service as secretary of the State board of charities and reforms so that practically his entire time may be given to the school system; (3) by making the position appointive instead of elective (see p. 83); (4) by adding to the department at least two efficient field agents to act as inspectors of secondary schools, vocational schools, and special schools receiving State aid, and as advisers

and assistants to the State superintendent in the performance of his duties; (5) by providing an annual State appropriation to be expended by the State board of education on the recommendations of the State superintendent for assisting in paying the salaries of district supervisors employed in the counties, and for assisting industrial and vocational education, and for similar purposes that may be authorized by law.

The powers and duties conferred by law upon the State superintendent of public instruction should include the following:

1. To supervise all educational work supported in whole or in part by the State (the State university excepted) and report thereon to the board and to the United States Commissioner of Education.

2. To visit different parts of the State to assist educational work and collect and diffuse information in school affairs.

3. To prepare, publish, and distribute matter for the promotion of public-school work.

4. To collect reports from county and city superintendents and from private institutions, and to prepare and publish a complete report biennially on the status of education in the State and an annual statistical report.

5. To prepare blank forms for use by county superintendents in collecting data from districts, forms for the use of county treasurers and district treasurers in keeping account of the school receipts and expenditures, registration blanks and card records for use in all schools in the State, forms to be used in calling school meetings; and all other forms necessary for the use of school officials.

6. To compile and publish the school laws of the State.

7. To prepare courses of study for the public schools and to approve courses of study in all special schools receiving State aid.

8. To examine and approve textbooks and to publish lists of books which may be used in the State as basic texts such lists having first been approved by the State board of education.

9. To enforce State laws and regulations by withholding from any county the pro rata share of any school district maintaining a school violating such regulations until the State board of education takes action.

10. To hold an annual State teachers' institute and an annual convention of county and of city superintendents, and to approve the program of all regular county institutes.

11. To prepare or have prepared examination questions for teachers' certificates; to issue all teachers' certificates.

12. To prepare and publish plans and specifications for school buildings.

13. To interpret school laws and to advise school officers and teachers on all matters relative to the conduct of the schools.

14. To perform such duties as may be prescribed by law and, as executive officer of the State board, to perform such duties as the board may direct.

III. Nonpolitical School Officers.

The State superintendent of public instruction and his assistants should be selected and appointed by the State board of education, and the county superintendents by county boards of education in a manner similar to the method of selection and appointment of city superintendents by city boards of education and of college presidents by college boards of trustees.

These State and county education officers should be selected for their particular fitness for the positions to be filled, regardless of whether or not they are residents of the State, or of the county which they serve. Appointment should be for specified terms sufficiently long to insure the most effective service, the boards having power to remove from office for inefficiency or malfeasance. State and county officers so appointed would become the actual heads of the State and county systems, first in responsibility and opportunity, and able to count on long and definite terms of office by rendering good service.

IV. Provision for Expert Supervision of Rural Schools.

Each county with more than 40 teachers, not including those in supervised city systems, should be divided into supervisory districts containing approximately 30 teachers each,[1] and a supervisor for each district appointed, whose entire time should be devoted to the supervision of the schools in his district.[2] The salary for the supervisory work should be paid by the State and by the county in equal amounts. Minimum general education, professional education, and successful teaching experience should be required. The supervisors should be directly responsible to the county superintendent for their work, should be appointed on the recommendation of the county superintendent, and hold office while giving satisfactory service. The supervisory districts should be created and the supervisors appointed by a county board of education, and should remain in office until resigning or until removed by the board for cause. Each county superintendent, when eligible as far as general education, professional education, and successful teaching experience is concerned, should serve as supervisor of one district in his county and should

[1] The State school code committee recommend that the first sentence to this point should read: "Provision for expert supervision of rural schools by dividing each county, exclusive of supervised city systems, into supervisory districts containing approximately 20 teachers each." It also recommends that provision should be made so that two counties may maintain a joint supervisory district.

[2] It would be advisable to have these supervisors, when qualified for the work, serve also as boys' and girls' agricultural and canning club agents for the extension department of the State agricultural college. The summer months would be free to devote to the club work supervising the home projects. Whenever such arrangement is made, an equitable part of the total salary should be paid by the extension department.

receive the extra pay for this work.[1] This would increase the income of county superintendents, so that the position would be more desirable than at present.

V. A County Board of Education.

To divide the county into supervisory districts and appoint supervisors as recommended above, provision should be made in each county for a county board of education. The board should appoint the county superintendent also. (See p. 88.) The board should consist of five persons, not more than two of whom should be residents of incorporated cities with independent systems employing school superintendents. The members should be elected by popular vote for six-year terms, two of which would expire each biennium. Members should serve without pay, but should receive necessary expenses.

The county board should have also the following additional functions, powers, and duties:

1. To advise the county superintendent in the duties conferred upon him by constitution or law.

2. To exercise the functions, powers, and duties now conferred upon "the district boundary board," viz, full authority to determine the number and the boundaries of local districts into which the county is divided.

3. To exercise the functions, powers, and duties now conferred upon the board of directors of the county library, so that the schools may be branch libraries, and the benefits of the libraries may be available both for the children and the adults living outside of the county seat.[2]

4. To fix the county school levy within statutory limits and apportion the county school funds in whatever way may be provided by law. A recommendation concerning the manner of apportionment is given below.

5. To approve the location and plans of all schools that receive any portion of the county funds for any purposes.

6. To purchase or direct the purchase of all textbooks and instructional supplies, such as maps and charts, upon the recommendation of the county superintendent and the district supervisors and in accordance with the regulations of the State board of education.

7. To assume full control and management of all high schools in the county except those in independent incorporated city systems employing superintendents. The high schools under the control of the county board should be supported entirely from county funds (plus the State apportionment). They should be free to residents of

---

[1] This is suggested as a temporary arrangement, to be in effect only until the constitutional limit to county superintendents' salaries is removed.

[2] The School Code Committee do not adopt this recommendation.

the county, and children attending who live more than 5 miles from any high school should receive from the county school funds an amount sufficient to pay in part for transportation for days actually attended or for board and lodging near the school, in the discretion of the board. High schools in incorporated districts employing superintendents should receive from county funds a per capita amount based on the aggregate daily attendance not greater than the per capita cost of maintenance on the same basis of the high schools of the county under the county board.[1]

8. To approve the appointment and salaries of teachers employed in the county (except those in independent incorporated city districts under superintendents) who receive their salary in whole or in part from county funds, with full power to dismiss teachers for cause.

9. To provide adequate clerical assistants to county superintendents.

VI. Independent Supervision of City Districts.

It should be provided that incorporated city districts employing superintendents devoting half or more than half of their time to supervision may, on the approval of the State board of education, be independent of the authority of the county board and of the county superintendent in so far as the administration of the schools is concerned. They should be required to make to the county superintendent such reports as may be required by the county board and the State department of education; also before receiving any portion of the State or county funds to submit to the county board satisfactory evidence that schools have been maintained the minimum required term and taught by teachers holding certificates issued by the State department, and that all other regulations of the State have been complied with.

VII. A More Equitable Distribution of the Burden of the Support of Education.

Provision should be made for a constitutional amendment so that the State school funds may be distributed to the counties, one-half in proportion to the number of teachers employed and one-half on the aggregate daily attendance,[2] and reapportioned in the county as the legislature may determine from time to time as conditions change. Apportionment of the State funds by the counties to the districts

[1] The school code committee recommend this paragraph to read as follows: "7. To assume full control and management of all high schools in the county except those in independent incorporated city systems employing superintendents. The high schools under the control of the county board should be supported by a county high-school tax assessed on all taxable property in the county except that included in independent incorporated city districts supporting high schools. The county high-school tax may be used in the discretion of the board for paying tuition of pupils attending high schools in independent districts or in adjacent counties. The county high schools should be free of tuition to residents of the county."

[2] The State school code committee insert here the words "double amount being given for high-school teachers and attendance."

on the same basis suggested would be advisable until conditions change materially.

A continuing State fund should be provided by appropriation or by millage tax which, together with the income from the permanent school funds and school lands, would constitute an annual school fund equal in amount to approximately one-third of the total cost of maintenance of schools, and distributed as above. Before distribution a portion should be reserved for the employment of assistants in the State department of education, the partial payment of the salaries of supervisors employed in the counties, and for special aid to assist in the support of vocational agricultural schools and courses, domestic science schools and courses, trade schools, and other institutions.

A larger part of the support of schools should come from State and county and a smaller part from local districts. This may be accomplished by increasing the county school tax to an amount equal to $500[1] multiplied by the number of teachers. This should be apportioned by the county board to the various districts in proportion to the number of approved teachers employed. In determining the number of teachers to be used as a basis of distribution, only those should be counted whose appointment and salary have been approved by the county board and who are teaching in schools which the board has specifically authorized to be held and which have maintained the prescribed minimum term, with such minimum attendance as the board may prescribe; further, no district should receive from county funds (State apportionment not included) a sum more than twice as great as the amount raised by local district tax, unless the local tax is the maximum allowed by law. Before distribution the amount required for high-school purposes and a portion sufficient to pay the expenses of the county board of education and the salary and traveling expenses of the district supervisors should be set aside.

Local districts should continue to tax themselves as at present, the amount to be collected by the county treasurer and held in the county treasury to the credit of the district.

The county treasurer should be custodian of all school funds, whether county or local, holding such funds to the credit of the individual districts and paying warrants drawn upon them only when signed by two members of the local board. His accounts of receipts and disbursements of all school funds should be audited by the county board or its agent.

---

[1] The State school code committee recommend an amount equal to $400 multiplied by the number of elementary teachers; also that the words "the amount required for high-school purposes and" be omitted. Both of these changes result from the changed suggestion in regard to the support of high schools. (See p. 101.)

VIII. Requirements for a Higher Standard of General and Professional Education for Teachers.

The legislature should fix an early date after which no teacher should be engaged who has not an education equivalent to graduation from a four-year high school and a minimum of professional work in some approved school. The requirement for the professional preparation should be increased, so that on and after the 1st of September, 1922, it will include graduation from a two-year course in a standard normal school whose entrance requirements presuppose four years of standard high-school work or its equivalent.

The county institute should be replaced by a two-day teachers' conference with the county superintendent and supervisors, the money now appropriated for institutes being used for the support of summer schools with sessions four to six weeks in length and under the control of, and at such places as may be determined by, the State board of education.[1]

IX. Provision for Professional Training for Teachers.

Provision should be made for securing a larger proportion of professionally trained persons to teach in the public schools. At present the State university is the only institution in the State which gives such professional training. It may be possible that the university can make such adjustments as will enable it fully to meet the demands. The need must be met either through the university itself or by establishing additional normal schools to be conveniently located in different parts of the State and under the management and direction of the State board of education.

X. Reorganization of the Plan of Certification of Teachers.

Provision should be made for transferring to the State board of education the administration of the certification of teachers. A division of the department of education should be created as a Teachers' Employment and Certification Bureau. The division should be under the immediate charge of a chief appointed by the State board on the recommendation of the State superintendent. It should have on file a register of available teachers with qualifications, etc., and be ready to recommend teachers for vacancies upon request. It should hold teachers' examinations for certificates or examine credentials relative to their education, training, and experience, and recommend candidates to the State superintendent for certification.

The rules and regulations relative to certification requirements, the kinds of certificates to be issued, and the requirements for each cer-

[1] The State school code committee recommend this paragraph to read as follows: "The county institutes should be replaced by a two-day rural teachers' conference with the county superintendent and supervisors. Provision should also be made for summer schools under the control of and at such places as may be determined by the State board of education."

tificate should be left entirely to the State board of education, acting upon recommendation of the State superintendent.

XI. Provision for Vocational Education.

Vocational courses in agriculture, household science, and the more usual trades for both boys and girls should be established in special departments in selected high schools in the State. This work should be under the direct supervision of the State department of education and should receive annually from the State department special State financial aid, as experience in other States has shown that satisfactory vocational work will not be established otherwise, and to be satisfactory must be properly supervised.

XII. Control of Special State Institutions by the State Board.

The State School for the Blind and Deaf, at Cheyenne; the Wyoming School for Defectives, at Lander; and the Wyoming Industrial Institute, at Worland, should be under the complete administrative control and management of the State board of education.

APPENDIX.—STATISTICAL COMPARISON.

Per cent of school population (5 to 18 years of age) enrolled, 1913–14.

United States—74 per cent.

North Atlantic Division:
Rhode Island—63 per cent.
New Hampshire—65 per cent.
New York—68 per cent.
Pennsylvania—68 per cent.
Massachusetts—72 per cent.
New Jersey—74 per cent.
Connecticut—77 per cent.
Vermont—77 per cent.
Maine—88 per cent.

North Central Division:
Wisconsin—66 per cent.
Illinois—71 per cent.
South Dakota—71 per cent.
Ohio—75 per cent.
Minnesota—76 per cent.
North Dakota—77 per cent.
Michigan—78 per cent.
Indiana—79 per cent.
Missouri—80 per cent.
Kansas—83 per cent.
Nebraska—85 per cent.
Iowa—87 per cent.

South Atlantic Division:
Virginia—66 per cent.
Delaware—69 per cent.
Georgia—69 per cent.
Maryland—70 per cent.
South Carolina—73 per cent.
Florida—76 per cent.
West Virginia—78 per cent.
North Carolina—79 per cent.
District of Columbia—80 per cent.

South Central Division:
Louisiana—51 per cent.
Texas—62 per cent.
Alabama—66 per cent.
Kentucky—77 per cent.
Mississippi—80 per cent.
Oklahoma—80 per cent.
Arkansas—84 per cent.
Tennessee—88 per cent.

Western Division:
New Mexico—60 per cent.
Nevada—72 per cent.
Arizona—77 per cent.
Washington—77 per cent.
Oregon—78 per cent.
Utah—80 per cent.
Idaho—82 per cent.
Colorado—84 per cent.
WYOMING—84 per cent.
Montana—87 per cent.
California—90 per cent.

Number attending daily for each 100 pupils enrolled, 1913–14.

United States—74.

North Atlantic Division:

New Jersey—77.

Maine—78.

Vermont—79.

Rhode Island—79.

Connecticut—79.

New Hampshire—79.

Pennsylvania—80.

New York—81.

Massachusetts—85.

North Central Division:

North Dakota—69.

Missouri—73.

Wisconsin—74.

Iowa—74.

Nebraska—75.

South Dakota—76.

Michigan—77.

Minnesota—78.

Kansas—79.

Indiana—80.

Ohio—81.

Illinois—87.

South Atlantic Division:

Delaware—63.

Georgia—65.

Maryland—65.

Virginia—66.

South Carolina—66.

North Carolina—68.

West Virginia—70.

Florida—71.

District of Columbia—82.

South Central Division:

Kentucky—55.

Mississippi—61.

Alabama—62.

Oklahoma—65.

Texas—67.

Arkansas—68.

Louisiana—69.

Tennessee—73.

Western Division:

Colorado—67.

Arizona—68.

Nevada—73.

New Mexico—74.

Montana—74.

Idaho—75.

Washington—76.

California—78.

WYOMING—82.

Utah—82.

Oregon—92.

Average number of days attended by every child 5 to 18 years of age, 1913–14.

United States—87.

North Atlantic Division:

New Hampshire—88.

Pennsylvania—94.

Rhode Island—96.

New Jersey—104.

New York—104.

Vermont—106.

Massachusetts—111.

Connecticut—113.

Maine—116.

North Central Division:

Wisconsin—81.

North Dakota—86.

South Dakota—88.

Minnesota—95.

Missouri—95.

Indiana—99.

Illinois—99.

Ohio—103.

Michigan—104.

Nebraska—108.

Kansas—113.

Iowa—115.

South Atlantic Division:

South Carolina—50.

Virginia—59.

Georgia—63.

North Carolina—65.

Florida—66.

Delaware—74.

West Virginia—74.

Maryland—81.

District of Columbia—115.

South Central Division:

Louisiana—46.

Alabama—51.

Texas—55.

Kentucky—60.

Mississippi—60.

Oklahoma—70.

Arkansas—73.

Tennessee—77.

Western Division:

New Mexico—61.

Arizona—81.

Nevada—85.

Idaho—93.

Colorado—96.

WYOMING—96.

Washington—103.

Montana—105.

Utah—107.

Oregon—111.

California—122.

Number of pupils in high schools per 1,000 in elementary schools, 1913–14.

United States—76.

North Atlantic Division:

Pennsylvania—71.

New Jersey—80.

Connecticut—94.

Rhode Island—95.

New York—98.

Maine—112.

Vermont—113.

Massachusetts—131.

New Hampshire—132.

North Central Division:

North Dakota—63.

Missouri—66.

South Dakota—74.

Illinois—77.

Michigan—93.

Wisconsin—93.

Minnesota—94.

Ohio—94.

Indiana—101.

Iowa—102.

Nebraska—103.

Kansas—117.

South Atlantic Division:

South Carolina—29.

Florida—33.

West Virginia—35.

North Carolina—35.

Georgia—36.

Maryland—57.

Virginia—58.

Delaware—66.

District of Columbia—152.

South Central Division:

Mississippi—25.

Arkansas—26.

Kentucky—32.

Alabama—36.

Louisiana—36.

Tennessee—41.

Oklahoma—41.

Texas—64.

Western Division:

New Mexico—37.

Arizona—60.

WYOMING—67.

Montana—78.

Idaho—82.

Nevada—91.

Colorado—100.

Utah—118.

Washington—125.

Oregon—125.

California—134.

Number of pupils in colleges per 1,000 in elementary schools, 1913–14.

United States—19.

North Atlantic Division:

New Jersey—10.

Rhode Island—18.

Vermont—20.

Pennsylvania—20.

Connecticut—21.

Maine—22.

New Hampshire—24.

New York—25.

Massachusetts—35.

North Central Division:

North Dakota—14.

Missouri—20.

Ohio—21.

Minnesota—21.

Iowa—21.

South Dakota—22.

Michigan—25.

Kansas—27.

Indiana—28.

Nebraska—29.

Illinois—30.

Wisconsin—30.

South Atlantic Division:

Delaware—4.

Florida—7.

West Virginia—9.

North Carolina—10.

Georgia—10.

South Carolina—11.

Virginia—15.

Maryland—22.

District of Columbia—103.

South Central Division:

Arkansas—4.

Mississippi—7.

Alabama—9.

Oklahoma—9.

Kentucky—11.

Tennessee—11.

Louisiana—12.

Texas—13.

Western Division:

New Mexico—5.

WYOMING—6.

Montana—9.

Idaho—11.

Arizona—14.

Utah—20.

Colorado—24.

Washington—25.

Nevada—27.

Oregon—28.

California—35.

NOTE.—It should be remembered in the interpretation of this data that such States as New York, Massachusetts, and California have many nonresident students enrolled in colleges within their borders.

Number of men 21 years and over for each 100 children 5 to 18 years old (1910).

United States—107.

North Atlantic Division:
Pennsylvania—105.
New Jersey—110.
Rhode Island—111.
Connecticut—115.
Massachusetts—116.
New York—117.
Vermont—119.
Maine—120.
New Hampshire—123.

North Central Division:
North Dakota—93.
Wisconsin—93.
Nebraska—95.
South Dakota—96.
Kansas—98.
Iowa—98.
Missouri—98.
Minnesota—99.
Indiana—106.
Illinois—108.
Michigan—109.
Ohio—113.

South Atlantic Division:
South Carolina—58.
North Carolina—63.
Georgia—66.
Virginia—74.
West Virginia—84.
Florida—87.
Maryland—94.
Delaware—107.
District of Columbia—144.

South Central Division:
Mississippi—65.
Alabama—67.
Louisiana—70.
Arkansas—70.
Texas—72.
Tennessee—74.
Oklahoma—78.
Kentucky—79.

Western Division:
Utah—85.
New Mexico—88.
Idaho—113.
Colorado—125.
Arizona—129.
Oregon—148.
Washington—151.
Montana—165.
California—169.
WYOMING—179.
Nevada—180.

Value of property for each child 5–18 years old (1913).

United States—$7,337.

North Atlantic Division:
Maine—$5,900.
New Hampshire—$6,300.
Rhode Island—$6,600.
Pennsylvania—$6,900.
Massachusetts—$7,300.
Connecticut—$7,900.
New Jersey—$8,100.
Vermont—$9,500.
New York—$9,900.

North Central Division:
Missouri—$6,300.
Wisconsin—$6,400.
Michigan—$7,100.
Indiana—$7,200.
Ohio—$7,300.
South Dakota—7,500.
Minnesota—$8,900.
Kansas—$9,400.
Illinois—$10,000.
Missouri—$10,700.
North Dakota—$10,900.
Iowa—$12,700.

South Atlantic Division:
District of Columbia—$16,369.
North Carolina—$2,200.
South Carolina—$2,500.
Georgia—$2,600.
Virginia—$3,400.
Florida—$4,300.
Delaware—$5,700.
Maryland—$5,700.
West Virginia—$5,800.

South Central Division:
Mississippi—$2,100.
Tennessee—$2,700.
Alabama—$2,900.
Kentucky—$3,100.
Arkansas—$3,400.
Louisiana—$3,800.
Texas—$5,000.
Oklahoma—$7,300.

Western Division:
New Mexico—$4,700.
Idaho—$5,900.
Utah—$6,300.
Arizona—$8,600.
WYOMING—$10,200.
Washington—$10,400.
Oregon—$11,100.
Colorado—$11,100.
Montana—$12,300.
California—$15,500.
Nevada—$28,400.

Expenditure for school purposes per $10,000 of estimated wealth, 1911–12.

United States—$25.7.

North Atlantic Division:

New York—$23.2.

Rhode Island—$24.8.

Connecticut—$27.2.

Pennsylvania—$27.5.

New Hampshire—$28.1.

Maine—$29.5.

Vermont—$34.4.

New Jersey—$35.5.

Massachusetts—$35.7.

North Central Division:

Iowa—$18.6.

Illinois—$22.1.

Nebraska—$23.1.

Kansas—$24.2.

Missouri—$25.2.

North Dakota—$25.5.

Wisconsin—$26.2.

Minnesota—$27.4.

South Dakota—$29.4.

Michigan—30.8.

Indiana—$31.7.

Ohio—$32.4.

South Atlantic Division:

South Carolina—$17.6.

Maryland—$19.

Delaware—$19.6.

North Carolina—$20.9.

Georgia—$21.4.

West Virginia—$21.8.

Florida—$22.2.

Virginia—$23.

District of Columbia—$25.5

South Central Division:

Oklahoma—$16.6.

Alabama—$17.4.

Mississippi—$20.9.

Arkansas—$21.

Texas—$21.1.

Louisiana—$21.3.

Tennessee—$28.8.

Kentucky—$29.5.

Western Division:

Nevada—$13.7.

New Mexico—$21.7.

Arizona—$26.3.

Colorado—$27.3.

WYOMING—$28.2.

California—$28.3.

Montana—$29.2.

Oregon—$31.3.

Washington—$32.7.

Utah—$46.4.

Idaho—$48.6.

Average value of school property per child of school age, 1913–14.

United States—$55.

North Atlantic Division:

Vermont—$55.

Maine—$57.

New Hampshire—$62.

Pennsylvania—$62.

Rhode Island—$66.

Connecticut—$82.

New Jersey—$85.

New York—$100.

Massachusetts—$109.

North Central Division:

Wisconsin—$36.

South Dakota—$52.

Missouri—$55.

Kansas—$57.

North Dakota—$60.

Michigan—$61.

Iowa—$62.

Nebraska—$66.

Indiana—$71.

Minnesota—$75.

Ohio—$78.

Illinois—$81.

South Atlantic Division:

North Carolina—$12.

South Carolina—$12.

Georgia—$15.

Virginia—$19.

Florida—$21.

Maryland—$31.

West Virginia—$33.

Delaware—$62.

District of Columbia—$151.

South Central Division:

Mississippi—$5.

Alabama—$13.

Kentucky—$19.

Louisiana—$19.

Tennessee—$21.

Arkansas—$21.

Texas—$23.

Oklahoma—$34.

Western Division:

New Mexico—$22.

Arizona—$35.

WYOMING—$60.

Utah—$75.

Idaho—$76.

Colorado—$79.

Montana—$86.

Oregon—$91.

Nevada—$97.

Washington—$101.

California—$128.

Total expenditure per capita based on average daily attendance, 1913–14.

United States—$39.04.

North Atlantic Division:
Maine—$34.27.
New Hampshire—$37.06.
Vermont—$38.28.
Rhode Island—$42.08.
Pennsylvania—$46.71.
Connecticut—$48.24.
Massachusetts—$52.36.
New York—$53.47.
New Jersey—$60.92.

North Central Division:
Missouri—$33.97.
Kansas—$39.29.
Michigan—$42.63.
Wisconsin—$42.75.
Iowa—$42.82.
Illinois—$42.92.
Indiana—$45.21.
South Dakota—$45.80.
Nebraska—$47.14.
Ohio—$48.82.
Minnesota—$52.08.
North Dakota—$64.45.

South Atlantic Division:
South Carolina—$11.65.
North Carolina—$12.39.
Georgia—$13.70.
Virginia—$19.78.
Florida—$21.88.
West Virginia—$25.96.
Delaware—$27.04.
Maryland—$34.46.
District of Columbia—$57.84.

South Central Division:
Mississippi—$9.30.
Tennessee—$13.61.
Arkansas—$14.60.
Alabama—$15.32.
Kentucky—$22.90.
Oklahoma—$24.46.
Louisiana—$24.68.
Texas—$25.88.

Western Division:
New Mexico—$26.83.
WYOMING—$48.08.
Oregon—$48.46.
Utah—$52.73.
Idaho—$55.06.
Colorado—$55.49.
Montana—$64.54.
Washington—$69.44.
California—$70.98.
Arizona—$71.39.
Nevada—$77.14.

Expenditure per capita based on average daily attendance; salaries only.

United States—$22.76.

North Atlantic Division:

Maine—$19.43.

Pennsylvania—$21.19.

Vermont—$21.22.

New Hampshire—$21.42.

Connecticut—$24.87.

Rhode Island—$25.37.

Massachusetts—$29.58.

New Jersey—$29.91.

New York—$35.97.

North Central Division:

Missouri—$21.84.

Illinois—$23.63.

Michigan—$23.92.

Ohio—$24.75.

Indiana—$25.25.

Kansas—$25.53.

Wisconsin—$26.33.

Iowa—$27.37.

Nebraska—$27.63.

Minnesota—$27.64.

South Dakota—$28.23.

North Dakota—$33.59.

South Atlantic Division:

North Carolina—$7.81.

South Carolina—$8.38.

Georgia—$10.36.

Virginia—$12.32.

Florida—$12.99.

West Virginia—$16.50.

Delaware—$18.40.

Maryland—$20.41.

District of Columbia—$40.

South Central Division:

Mississippi—$7.20.

Tennessee—$9.36.

Arkansas—$11.01.

Alabama—$11.71.

Kentucky—$13.56.

Louisiana—$16.13.

Oklahoma—$16.32.

Texas—$17.52.

Western Division:

New Mexico—$16.57.

Utah—$23.31.

Arizona—$25.60.

Montana—$25.87.

Oregon—$29.55.

Idaho—$29.80.

WYOMING—$31.20.

Colorado—$34.51.

Washington—$39.27.

California—$43.57.

Nevada—$48.79.

Average annual salary of all teachers, 1913–14.

United States—$525.

North Atlantic Division:

Maine—$399.

Vermont—$405.

New Hampshire—$418.

Pennsylvania—$459.

Connecticut—$599.

Rhode Island—$702.

Massachusetts—$729.

New Jersey—$851.

New York—$941.

North Central Division:

North Dakota—$416.

Ohio—$454.

South Dakota—$456.

Minnesota—$469.

Missouri—$500.

Iowa—$508.

Wisconsin—$517.

Michigan—$519.

Nebraska—$525.

Indiana—$594.

Kansas—$622.

Illinois—$690.

South Atlantic Division:

North Carolina—$243.

South Carolina—$273.

Georgia—$306.

Virginia—$307.

Florida—$327.

West Virginia—$350.

Delaware—$381.

Maryland—$545.

District of Columbia—$1,005.

South Central Division:

Mississippi—$234.

Arkansas—$317.

Tennessee—$321.

Alabama—$343.

Kentucky—$359.

Louisiana—$418.

Texas—$422.

Oklahoma—$422.

Western Division:

WYOMING—$435.

New Mexico—$437.

Oregon—$523.

Idaho—$586.

Colorado—$593.

Montana—$636.

Utah—$656.

Arizona—$699.

Nevada—$738.

Washington—$800.

California—$871.

Length of term in days, 1913–14.

United States—159.

North Atlantic Division:

Maine—168.

New Hampshire—172

Pennsylvania—172.

Vermont—173.

New Jersey—183.

Massachusetts—184.

Connecticut—185.

New York—190.

Rhode Island—194.

North Central Division:

Indiana—156.

North Dakota—159.

Minnesota—160.

Illinois—161.

South Dakota—163.

Missouri—163.

Wisconsin—168.

Ohio—169.

Nebraska—170.

Kansas—172.

South Atlantic Division:

South Carolina—104.

North Carolina—122.

Florida—123.

Virginia—136.

West Virginia—137.

Georgia—140.

Delaware—170.

District of Columbia—174.

Maryland—178.

South Central Division:

Tennessee—122.

Mississippi—123.

Alabama—125.

Arkansas—130.

Louisiana—130.

Texas—132.

Oklahoma—136.

Kentucky—140.

Western Division:

New Mexico—135.

WYOMING—139.

Idaho—152.

Oregon—155.

Arizona—156.

Nevada—160.

Utah—163.

Montana—163.

Colorado—171.

California—174.

Washington—177.

INDEX.

Act of 1869, 12–13.
Administration, State, 83–88.
Attendance, compulsory, 23; data, 39–43; statistics, various States, 106–108.
Blind and deaf, school, 20–21; recommendations, 104.
Boards of education, county, recommendations, 100–101.
Carbon County, statistics of schools (1870), 13.
Census and enrollment, 40.
Certification of teachers. *See* Teachers, certification.
Colleges, early history, 17. *See also* University of Wyoming.
Compulsory attendance, 23.
Constitution of Wyoming, provision for education, 27–28.
Cook, Katherine M., letter to Commissioner, 7–9.
County board of education, recommendations, 100–101.
County superintendent of schools, creation of office, 12; powers and duties, 22–23; recommendations, 99; training, tenure, and salaries, 22, 61–65.
Defectives, education, recommendations, 104.
District directors, powers and duties, 12.
District treasurer, powers and duties, 12.
Elementary schools, number of pupils, various States, 108.
Enrollment, data, 39–43.
Expenditures, 70.
Expenses, statistics, various States, 112, 114–116.
Feeble-minded, education, 21.
Funds, distribution in various States, 92–94.
High schools, early history, 16; establishment, 24; enrollment, 42–43; number of pupils, various States, 108.
Higher education, 24–25.
History of education, 11–26.
Hoyt, Governor, and University of Wyoming, 17.
Indian education, 20.
Industrial institute, recommendation, 104.
Instruction, quality and methods, 53–60.
Kindergarten, early history, 16.
Letter to the Commissioner, 7–9.
Monahan, A. C., letter to Commissioner, 7–9.
Negroes, and separate schools, 12.
Organization, local administration, 89–91.
Population at various dates, 11; per cent, various States, 105.
Private schools, early history, 16–17.
Property, value, in various States, 111, 113.
Public schools, statistics, 26.
Pupils, statistics (1875–1915), 14.
Recommendations, 96–117.
Revenue, for support of schools, 66–82.
Rural schools, supervision, 60–61; supervision, recommendations, 99–100.
Salaries, county superintendents, 22, 64–65; teachers, various States, 115–116.

School districts, 23.
School funds, 23–24, 71; distribution, recommendations, 101–102.
Schoolhouses, construction and equipment, 29–38; sanitary requirements, 30–33; statistics (1875–1915), 14.
School hygiene, 30–33.
School officers, nonpolitical, 99.
School sanitation. *See* School hygiene.
School system, present, outline, 21–26.
School term, statistics, various States, 117.
State board of education, recommendations, 96–97.
State board of examiners, powers and duties, 15.
State department of public instruction, recommendations, 97–99.
State superintendent of education, powers and duties, 21–22.
Supervision, city districts, recommendations, 101; rural schools, 60–61; various States, 88–89.
Supervision, rural schools, recommendations, 99–100.
Taxation, inequality of present system, 69–82.
Teachers, certification, 14–15, 24, 44–47, 51–53; recommendations, 103–104.
Teachers, methods of instruction, 53–60; statistics (1875–1915), 14.
Teachers, training, 25, 43–44, 48–53; recommendations, 103.
Teachers' associations, 21.
Teachers' institutes, 15–16.
Uinta County, statistics of schools (1870), 13.
University of Wyoming, buildings, 19–20; early history, 17–20; enrollment (1890–1916), 19; finances, 19; registration, 25.
Vocational education, Indians, 20; recommendations, 104.
Wyoming School Journal, establishment, 21.
Wyoming schools, statistics (1883–1889), 13.

○

Binder
Gaylord Bros., Inc.
Stockton, Calif.
T. M. Reg. U. S. Pat. Off.

YC 48724

M240616

LA39t
U6

Educ. Dept.
THE UNIVERSITY OF CALIFORNIA LIBRARY